

University of Groningen

A computational view of the brain plasticity at rest

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DOI:
[10.33612/diss.183130118](https://doi.org/10.33612/diss.183130118)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2021

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):
Invernizzi, A. (2021). *A computational view of the brain plasticity at rest*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. <https://doi.org/10.33612/diss.183130118>

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Acknowledgements

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ACKNOWLEDGEMENTS

Over the past years, I have realized that the most valuable currency in research is time. I was lucky enough to meet two incredible scientists that dedicated their time caring about my success, future and ideas: Prof. Frans Cornelissen and Dr. Remco Renken. Frans, many many thanks for your never-endless patience on reviewing my abstracts, manuscripts and this thesis for thousands of times. Thank you for your support and encouragement to always follow my ideas even when the path was not the easy one. Thank you for your time, ideas and for being an excellent example on how to lead a successful laboratory and still be a great scientist! Remco, not sure where to start in thanking you. You were literally the beta weight for all my analysis, ideas and projects. Thank you for the countless times that you lowered my expectations where results were too good to be true but especially, for showing me innovative solutions when nothing seemed to work out. Thank you for pushing me outside my comfort zone and for teaching me new mathematical models, methods and analyses. Thank you for the thousand hours that you spend in our weekly meetings. Your knowledge, enthusiasm on data, critical thinking and commitment to science are inspiring and a great example for me. I promise to avoid the word 'also', always plot the distribution of my data and also, to keep using permutation statistics.

I would like to thank Prof. Nomdo Jansonius for his brilliant scientific suggestions and insightful discussion over the years. Your great passion for research and care for your patients have inspired me.

A particular thank you to the reading committee members: Prof. Michael Hoffman, Prof. Holly Bridge and Prof. Iris Sommer for their helpful comments, their time and interest in this thesis.

To the Visual Neuroscience group (Shereif, Alessandro, Joana, Hinke, Minke, Birte, Rijul, Marouska, Barbara, Nicolas, Sang-yee and Anna) and experimental ophthalmology lab a big thank you for being my colleagues, source of advices, collaborator and sometimes, the best reviewers of my work - it was a honour working with you all. A special thanks to Shereif, Hinke, Joana, Alessandro my scientific, travel and sometime housemates buddies. A huge thanks to Kim for your help with patients, for teaching me how to use the ophthalmology devices and for being always there fixing everything last minute. Thanks to all the NIC (now CNC, but still NICE) people to have made my lunch breaks always enjoyable and a welcoming work environment. A special thanks to Jan-Bernard for your help with PEREGRINE, installing software and for helping and supporting me for whatever I needed over the years. A particular thanks to Anita and Judith for

helping me scan and always being available to acquire new data - my data collection wouldn't be possible without your help! Thanks to Diana, Evelyn, Stella, Ella, Wim, Richard and Hedwig for always taking care of all different and complicate aspects regarding administration, education or daily-issues with my UMCG email!

To all the EGRETErs (Allison, Birte, Valeria, Catarina, Asterios, Iris, Toumas, Lorenzo, Giorgia, Konstantinos, Vincenzo, Steven, Anna, Nigus, Sina, Daniel, Gokul, Jacqueline, Jeferson, Khaldoon, Philip, Rijul, Sandra, Shereif) thank you for all the fun memories all over Europe and the always inspiring scientific discussions! In particular, EGRET brought me two great friends. Konstantinos, thank you for your weird jokes, sarcasm, scientific knowledges and your support for everything I needed in the past years. Thank you for refreshing with me every single submitted manuscript! Gio, thank you for being kind, comprehensive and the best travel-mate ever, even in impossible trips (Groningen - Milan). Thanks for always being there for me. You two together managed somehow to made Groningen less gray but fun and enjoyable for me, even if you made me cook for at least five people and eat for all of them.

Agli amici di una vita, a Martina, Annalisa e Sabrina – grazie per aver reso la lontananza un'opportunità di viaggio verso mete nuove (Martina, innumerevoli le volte che ci siamo ritrovate in aeroporto o programmato un nuovo viaggio non ancora vissuto!), grazie per aver usato ogni mezzo di comunicazione per non farmi sentire mai sola (Annalisa ed i tuoi audio eterni!), grazie per aver sempre trovato il tempo per una parola, una cena o uno spritz nonostante i mille impegni (Sabrina credo di doverti ancora un paio di aperitivi...). A Gabriella, mia tutor della tesi magistrale che negli anni si è trasformata da tutor a fidata consigliera ad amica – non so ancora se ti debba ringraziare in quanto sono in questo assurdo percorso accademico soprattutto grazie a te, ai tuoi innumerevoli insegnamenti e per aver sempre creduto in me ciecamente. Grazie per esser un grande esempio scientifico e continuare ad essere la mia tutor, nonostante il ruolo non ti appartenga più da anni. Spero un giorno di essere lo stesso caposaldo che tu sei e sei stata per me, per un giovane scienziato.

Alla mia famiglia, a mia zia, ai miei nonni, quelli che mi hanno lasciata e quelli che mi accompagnano ancora in ogni gradino di crescita professionale e personale – grazie per esserci, per supportarmi senza fare troppe domande e per credere in me.

Ai miei genitori, Miriam e Gianfranco, mio porto sicuro in questo mare in continua tempesta. Non ci sono parole per ringraziarvi abbastanza, siete esempio di dedizione e amore per me.

A te Davide, mio compagno di vita, grazie per le innumerevoli discussioni scientifiche (e non!), per gli punti di riflessione e le brillanti idee, per essere il mio più fidato consigliere e leale amico. Sei stato molto probabilmente l'unico modello di cui non ho saputo stimare il noise e farne una predizione accurata, sicuramente l'unico che sceglierei di nuovo per accompagnarmi in questo viaggio.

CURRICULUM VITAE

Azzurra Invernizzi was born in November 18, 1988 in Abbiategrasso (Milan), Italy. In 2007 she started her bachelor program in Biomedical Engineering at the University of Pavia followed by the master program in Biomedical Engineering with a curriculum in Neuroengineering at the University of Genoa. During her master's, Azzurra specialized in the field of biomedical imaging, optics and signal processing. To perform her master thesis project, Azzurra joined the laboratory of theoretical neurobiology and neuroengineering at the University of Antwerp, under the supervision of Dr. Gabriella Panuccio and Prof. Michele Giuliano. Here she had the opportunity to apply her acquired engineering knowledge to study electrical responses from cortical neurons and microcircuits *in vitro*. Her master thesis was awarded with the "Bioengineering and Bioinformatics Laboratory prize" as outstanding dissertation in 2015.

Following her graduation, Azzurra joined the BIND group at the University of Oxford under the supervision of Dr. Mantini as research assistant. Her project was to develop novel imaging methods and analyses to study large-scale alterations of cortical activity induced by brain injury and their relevance to behavioral deficits. In 2016, Azzurra started a PhD in Computational Visual Neuroscience at the University Medical Center of Groningen, under the mentorship of Prof. Frans W. Cornelissen, Dr. Remco J. Renken and Prof. Nomdo M. Jansonius. Her PhD project that is presented in this thesis aimed to investigate and expand the knowledge on the biological and computational mechanisms underlying the plasticity of human brain activity at rest. As part of the European Glaucoma Research Training Program, Azzurra had the unique opportunity to collaborate with an interdisciplinary network of PhD students at leading laboratories in the field of visual neuroscience. She was a visiting PhD student at the Otto van Guericke University of Magdeburg, supervised by Prof. Micheal Hoffman and Dr. Lars Chorz.

Azzurra is currently a postdoctoral researcher fellow at Icahn School of Medicine at Mount Sinai, New York. Her project aims to investigate and better understand changes in connectivity and possible long-term reorganisation due to different environmental exposure by implementing biological-plausible models.

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LIST OF PUBLICATIONS

2021

Invernizzi A., Gravel N., Haak K.V., Renken R.J., Cornelissen F.W., "Assessing uncertainty in connective field estimations from resting state fMRI activity". *Front. Neurosci*, 2021. doi: 10.3389/fnins.2021.625309

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