



Physio Punk

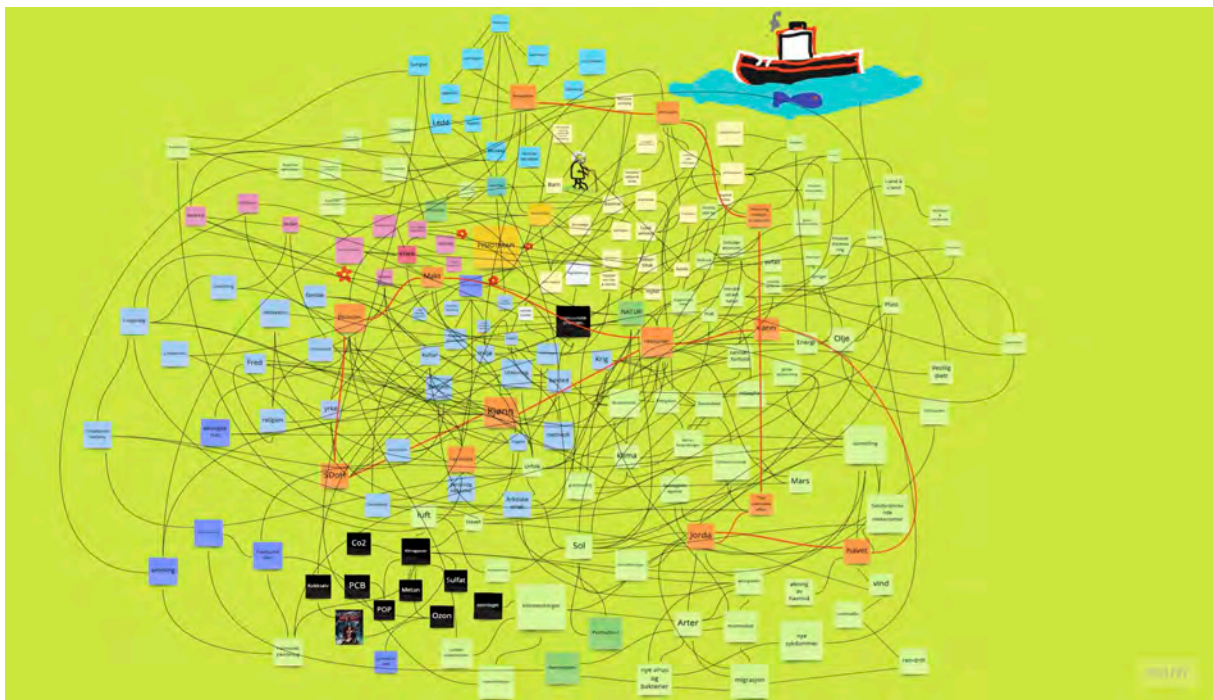
VOL 1

**SPECULATIVE FICTION
FOR FUTURE PHYSIOTHERAPIES**

OPENPHYSIO | JOURNAL

PHYSIOPUNK: SPECULATIVE FICTION FOR FUTURE PHYSIOTHERAPIES

Filip Maric, Liv Nikolaisen, Åse Bårdsen, *Bachelor program in physiotherapy, Institute for Health and Care Sciences, UiT The Arctic University of Norway.*



In light of today's deeply connected social and environmental crises, environmental and sustainability education is increasingly being integrated into public health and healthcare professional education around the world (Barna, Maric, Simons, Kumar & Blankestijn, 2020). The Norwegian 'regulations on national guidelines for physiotherapist education' clearly support the integration of these topics by stating that 'in addition to individually oriented work, physiothera-

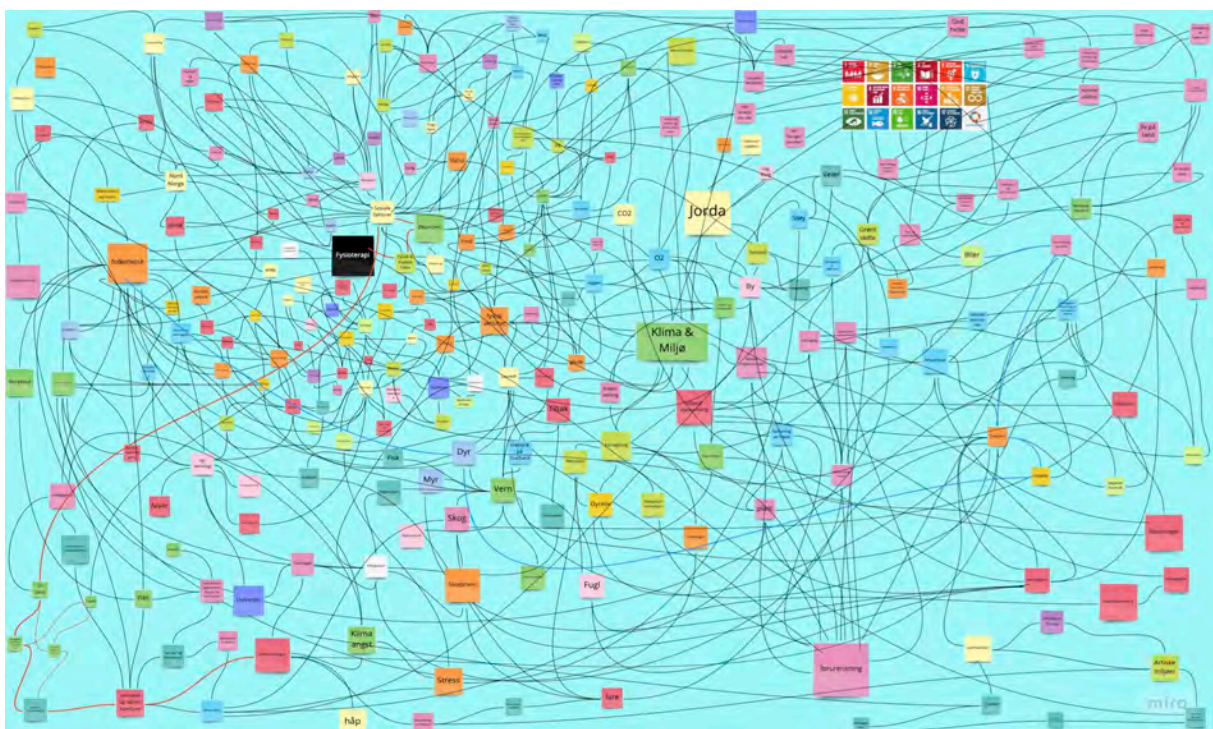
pists should contribute to improving public health and the sustainability of society on the group and system-levels...with competencies in interdisciplinary and goal-oriented collaborations within the health- and care-sector and other sectors...to meet societies existing and future needs' (Forskrift om nasjonal retningslinje for fysioterapeut-utdanning, 2019, our translation). In a new introductory public health module for our 1st year physiotherapy students at UiT Norges

arktiske universitet we therefore integrated education about the social and environmental problems of our time and how they interact with health at many levels to inspire students to imagine novel futures for physiotherapy and the role of healthcare professionals in the future.

The interconnected nature of today's social, environmental and health challenges requires systems- or complexity-thinking as a core competence (Guzmán et al, 2021). The foundation of the module therefore consisted of four days during which students gradually broadened their understanding of the complexities of health, health care and physiotherapy. The process of expanding students vision began with the creation of an online visual map representing everything they learned about physiotherapy during the 1st and 2nd semester so far, as well as their assumptions about physiotherapy prior

to entering the Bachelor program. This map was further expanded over the next three days as students learned about the social and ecological determinants of health, their global and local (northern Norwegian and arctic expressions and relevance), as well as the search for integrated solutions for them across recent developments like environmental physiotherapy, planetary health, sustainable healthcare and the UN Agenda 2030 Sustainable Development Goals.

The Sustainable Development Goals highlight the need for bold transformative change and contributions from all sectors of society if we are to achieve them (UN, 2015). To achieve this transformative change and implement solutions that do justice to the interconnected nature of today's social, environmental and health challenges, extensive innovation and transdisciplinary collaboration are required.



This, in turn, requires transformative visions, creative and compelling narratives that can inspire and drive change towards healthier, more just and sustainable futures. Work aimed at teasing out such narratives is driven by the assumption that 'imagination can build the anticipatory capacity to get ahead of the curve, rather than react to crisis' (Wyborn, et al., 2020). It has further been argued that particularly envisioning positive and desirable futures is a critical 'first step in creating a shared understanding and commitment that enables radical transformations toward sustainability in a world defined by complexity, diversity, and uncertainty' (Pereira, et al. 2018).

In the development of the written exam for this introductory module, we took inspiration from recent developments in fictional writing that are creatively seeking to respond to today's crises and develop compelling narratives of desirable futures for healthcare and society in general (Fernando, et al., 2019; Malpas, 2021). Day five of the module consisted in a full-day creative writing workshop that included an introduction to genres like science fiction, speculative fiction, climate- and eco-fiction, solar and hopepunk (where the term 'punk' is used to represent a radically different, but hopeful future); and a variety of creative writing, reading and storytelling exercises as a means to help students find a way into their written home exam.

Considerably different from other written exams and even student ex-

pectations of these, the exam task for this module was for each student to write a fictional story of future physiotherapy that goes beyond physical activity and workplace interventions for public health. Specifically, we asked students to envision futures in which physiotherapists work to address social and environmental problems directly, while only factoring in their deliberate, but indirect benefits for human health and functioning. Apart from the creative writing workshop, the main tools and evidence-base to help students develop these visions and trace links between social, environmental and health issues were the complexity-maps developed over the first four days of the module. Because of the knowledge tied into these maps, students did not have to use any literature to support their stories. We also explicitly advised them to push aside concern about whether their visions are realistic or feasible at this point in time but engage and therewith develop their imagination and creativity as freely as possible.

Though students reported challenges with the task and our instructions require some improvement for the next iteration of the module, our students also reported a high degree of satisfaction with the visual approach to systems-thinking and felt empowered by the permission to be creative and engage their imagination toward diversified healthcare futures. The final submissions encompassed an incredibly creative and diverse array of visions for future physiotherapies that respond to the complex, social and environmental

realities of health and care. Students' stories included visions of transformative forms of urban life on and below land and water, indigenous health leadership, working for the availability of clean air and green infrastructure, civilization and physiotherapy on Mars, multispecies co-existence, AI, robotics, and many more.

In collaboration with our students, we are excited to share a selection of stories that most closely adhered to the guidelines we had provided, felt especially meaningful by themselves, and happened to tell an overarching story as a coincidental series. This introduction was written to provide readers with clarity about the context in which these stories emerged. We highlight a few last considerations that should be kept in mind in the process of reading to avoid misunderstandings and, most importantly, any negative consequences for the students that have offered their stories for publication.

First off, it should be clear that neither all health, nor all social, ecological and technological detail are necessarily 100% accurate. The goal of this module was not to develop perfect solutions to social and environmental issues in the sense of new technologies, new clinical approaches, new policies, or similar. An advanced 3rd year module that we are currently developing will provide students with an opportunity to deepen their understanding and develop ideas towards 'more realistic' future public health interventions. The stories in the selection published here represent something different.

In a general sense, they represent first steps in finding one's way through the complex realities of healthcare as they tussle with previously unconsidered connections between health, society and environment. They stretch between an individual health orientation and a broader, societal and public health orientation as they push and pull on their emerging thoughts about either. Yet, precisely as Pereira et al. noted, it should also be clear that 'although these futures are highly innovative and exploratory, they still link back to current real-world initiatives and contexts' in different ways (Pereira et al., 2018). They link gradually deepening knowledge about anatomy, physiology, movement, health and more, to previously unconsidered social and environmental problems that can no longer be separated from the former. In doing so, they also question the global and professional values and practices that have gotten us into today's social, environmental and health crises, including paradoxes and problems that haunt physiotherapy's past and present.

Our profession has always been changing and discussing the importance of ongoing change but, at the same time, change has also been notoriously slow and sometimes met with fevered resistance. In today's world, heavily influenced by and sometimes even lived through social media, new and different ideas, people and values can also be met with considerable hostility. Writing and reading fictional stories is undoubtedly still very new and 'different' in the

context of physiotherapy and will seem strange, if not wrong to some.

Our students are showing a high degree of courage in sharing their stories with us and the broader public. In their search for novel futures, they express their fears, values and hopes, for the future, for themselves, for their future work as physiotherapists, and for the physiotherapy profession in general. In some stories, it feels as though a strong motivation and a new and bigger sense of agency grows in the students. In this sense, all of these stories are also deeply personal and intimate and so we ask and hope that readers will treat them with respect and appreciation, however they might feel about the stories or the context in which they arose. In all instances, we believe that while praise should be directed at our students, all criticism should be directed at us, as the educators responsible for the platform on which these stories could emerge. We have developed this module on the basis of some of the most up-to-date research and discourses in healthcare and tertiary education alike, and we always welcome constructive discussion of our efforts that can help us facilitate the best possible learning for our future colleagues.

Each story will be prefaced with a short paragraph providing further information on its specific context of social, environmental and health thoughts and questions, and some reflections on how it can inspire our thinking today. In stretching beyond the momentarily realistic, the implicit and maybe most

important goal of this exercise was to inspire people who dare to think and dare to dream, who dare to be creative, and so develop the imagination, cognitive flexibility and playfulness needed for 'radical transformations toward sustainability in a world defined by complexity, diversity, and uncertainty' (Pereira, et al. 2018). This adds competencies that, we believe, will considerably extend the growing professional knowledge and skills of our students.

As a series, these eight stories help us question what physiotherapy has been, what it is now and, most importantly, what it might be in the future. The point of fictional stories is to let us free of the confines of established conventions in thought and practice and spark our imagination towards the new. We hope that the eight incredible stories collected in this series will inspire and contribute to the open discussion about the future of physiotherapy and healthcare, filled with creativity and genuine care for the health of everyone we share this planet with.

REFERENCES

- Barna, S., Maric, F., Simons, J., Kumar, S. & Blankestijn, P.J. (2020): Education for the Anthropocene: Planetary health, sustainable health care, and the health workforce, *Medical Teacher*, 42(10): 1091-1096. doi:10.1080/0142159X.2020.1798914
- Berry, H. L., Waite, T. D., Dear, K. B. G., Capon, A. G., & Murray, V. (2018). The case for systems thinking about climate change and mental health. *Nature Climate Change*, 8(4), 282-290. doi:10.1038/s41558-018-0102-4
- Fernando, J.W.; O'Brien, L.V.; Judge, M.; Kashima, Y. More Than Idyll Speculation: Utopian Thinking for Planetary Health. *Challenges* 2019, 10, 16. doi:10.3390/challe10010016
- Forskrift om nasjonal retningslinje for fysioterapeututdanning. (2019). Forskrift om nasjonal retningslinje for fysioterapeututdanning (FOR-2019-03-15-410). Lovdata. Hentet fra <https://lovdata.no/dokument/SF/forskrift/2019-03-15-410>
- Guzmán, C. A. F., Aguirre, A. A., Astle, B., Barros, E., Bayles, B., Chimbari, M., . . . Zylstra, M. (2021). A framework to guide planetary health education. *The Lancet Planetary Health*. doi:10.1016/s2542-5196(21)00110-8
- Malpas, I. (2021). Climate fiction is a vital tool for producing better planetary futures. *The Lancet Planetary Health*, 5(1), E12-13. doi:10.1016/s2542-5196(20)30307-7
- Pereira, L. M., Hichert, T., Hamann, M., Preiser, R., & Biggs, R. (2018). Using futures methods to create transformative spaces: visions of a good Anthropocene in southern Africa. *Ecology and Society*, 23(1). doi:10.5751/es-09907-230119
- UN (2015). *Transforming Our World, the 2030 Agenda for Sustainable Development*. General Assembly Resolution (United Nations). A/RES/70/1. New York: United Nations Publishing; 2015.
- Wyborn, C., Davila, F., Pereira, L., Lim, M., Alvarez, I., Henderson, G., . . . Woods, E. (2020). Imagining transformative biodiversity futures. *Nature Sustainability*, 3(9), 670-672. doi:10.1038/s41893-020-0587-5

SUGGESTED CITATION

Maric, F., Nikolaisen, L.J., & Bårdsen, Å. (2021). Physiopunk: Speculative fiction for future physiotherapies. In: Maric, F., Nikolaisen, L.J., & Bårdsen, Å. (Eds.). *Physiopunk Vol 1*. OpenPhysio Journal. <https://doi.org/10.14426/opj/202111pp01>