

Submissions Abstract Book - All Papers (All Submissions)

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Conformity unquestioned: Career futures in biotechnology

Oili-Helena Ylijoki¹

¹*University of Tampere, Tampere, Finland*

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Abstract: This paper explores career futures in biotechnology. Drawing upon conceptualisations by Adam and Groves (2007), the focus is on the dynamics between "the present future" and "the future present" in academics' career imaginaries. The questions addressed include: How many and what kinds of futures there are? How are they related to the present? What kind of temporality is needed to get to the future? The empirical basis comprises focused interviews with female academics in biotechnology at one Finnish university.

The career imaginaries include two options: a tenure track with a linear and vertical career path, and a fixed-term and horizontal employment as an academic entrepreneur. Career envisioning in biotechnology is overshadowed by the power of the nearby discipline, medicine, which creates unequal conditions for career building. This points to intersections of gender, disciplinary hierarchies and university's institutional structures.

Reference:

Adam, B. & Groves C. 2007. *Future Matters*. Leiden: Brill.

Paper: Academic career building has become increasingly competitive and standardized in the current managerial university context (Henkel 2010). In the Finnish higher education system, the number of qualified PhD holders has increased rapidly at the same time as the number of available permanent university positions has decreased. Moreover, the recent introduction of the tenure track model has created a new, rigid and very selective career path in academia, increasing the polarisation between have and have not groups (Ylijoki & Henriksson 2017).

Against this background, I will explore how female academics in the field of biotechnology build their

career trajectories. Biotechnology is a multidisciplinary and female-dominated field which has made fast scientific progress, involving also high expectations of commercial success and practical utility in health care. My claim is that by investigating this particular field, it is possible to make visible complex intersections between gender, disciplinary hierarchies and institutional structures. This sheds new light into the dynamics between creativity and conformity in academic career building.

Theoretically, the paper draws upon time studies and notions of acceleration in higher education (Vostal, 2016). It explores how career futures are envisioned and career continuity aimed at. Based on conceptualisations by Adam and Groves (2007), the focus is on the dynamics between "the present future" and "the future present" in academics' career imaginaries. The questions addressed include the following: How many and what kinds of futures there are? How are they related to the present? What kind of temporality is needed to get to the future? What are the obstacles and enablements envisioned?

The empirical basis of the paper comprises focused interviews with 16 female academics working in biotechnology. They all have a close connection to one Finnish university, either they still work there, or they have worked there before. The interview situations were open, allowing the interviewees tell freely about their work experiences and practices, including hopes, fears and aspirations of the future. In addition, the interviewees were asked to draw a career line in advance and the interviews were constructed according to their drawings.

The results point to the crucial importance of the post-doc phase in career building in this field. At this phase, academics need to establish their own research group and become a PI with the responsibility for fund-raising for their group. This is a radical change from the position of a doctoral student. Likewise, post-docs need to decide whether they really want to stay in academia, knowing that if they leave there is no coming back. The future career imaginaries in academia entail only two options: a tenure track or academic entrepreneur. ‘

The tenure track offers a linear and vertical career path to a permanent position as a full professor. It requires a steady and standardized advance with no deviations nor boundary crossings. Success in fund-raising and in building an impressive CV is necessary in order to get to and stay on the tenure track. This creates strong performance pressures and leads to "anticipatory acceleration" (Müller, 2014), meaning speeding-up work practices and getting more and better outcomes in a shorter period of time (Vostal, 2016). Because of the heavy competition for few tenure track positions, the career imaginaries are linked with self-doubt and worries about work-life imbalance.

The other future option is a fixed-term employment as a sort of academic entrepreneur of one's research group. It offers a circular and horizontal career path from project to project but no visions of upward mobility in career ladder. This career is dependent on general funding conditions and research policy priorities, which makes it uncertain and insecure. This makes its position within the university structures vulnerable and fragile. Academic entrepreneurs lead "quasi-firms" at their own risk. They are responsible for attracting funding not only for their group but also for themselves. Because of this, a psychological contract is questioned in this imaginary: academic entrepreneurs bring in substantial amounts of revenue but do not necessarily get institutional support, access to decision-making bodies, or recognition in recruitments.

The special feature of the future horizons is that career building in biotechnology is overshadowed by

the power of the nearby discipline, medicine. In the case university, biotechnology has experienced several mergers, the last one fusing it to the Faculty of Medicine. This is seen to create unequal conditions for career building between these two competing fields. Biotechnology is a female-dominated, new and multidisciplinary field, its institutional position is weak, and it has no professional linkages outside of academia. By contrast, medicine is a male-dominated, traditional and valued discipline, its position in the university structures is powerful, it has strong professional backup (medical doctors), and it draws on hospital hierarchies.

In this way, the intersections of gender, disciplinary hierarchies and university's institutional structures shape and mould what kind of career futures are possible to envision. Imaginaries of future are filled with constraints and limitations with hardly any signs of "imagining otherwise" (Clegg, 2010) or envisioning new kinds of career futures in academia. Yet, the female academics in biotechnology are no victims but they navigate under these constraint circumstances skilfully and successfully in their work both in and outside of academia. More generally, the results point to several dilemmas in academic career futures, such as flexible career paths and border crossings vs. increasingly standardized and linear tenure track model; fast advancing science vs. stiffness of university structures, and interdisciplinary research vs. discipline-based merits in academic recruitments.

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