Brain Drain and reversing it

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Although two-third of postdocs go and work outside academia due to unavailability of faculty positions, there is an additional trend of losing our highly skilled force to the industry for other reasons, like salary / benefit issues, or research funding challenges that may put tenure at risk after a 5-7 year period. Is there any way to retain these people? Beyond that, can we absorb or attract HEP alumni in industry back into academia? For example those with technical skills in detectors and computing. Besides differences in salary, what else do we need to attract them back? In areas of Engineering, Management etc. it is common for people to switch between academia and industry, or work in parallel in both, but in HEP leaving our field is (in practice) a one-way road. An understanding of this could illuminate steps leading to an increase in the workforce needed to solve challenges in HEP projects. The goal of this LOI is to explore what steps should be taken to prevent brain drain in the first place and identifying hurdles in the path of reversing brain drain (including mindsets from the HEP side).

[1] <u>https://physicsworld.com/a/uk-physicists-warn-of-brain-drain-over-funding-freeze/</u>

[2]https://www.aei.org/pethokoukis/brain-drain-to-wall-street-goldman-sachs-hires-god-particle-physicist/

[3]<u>https://www.forbes.com/sites/paulmsutter/2019/05/17/science-is-facing-a-brain-drain/#11c0c473c</u> 539

[4] https://jakevdp.github.io/blog/2013/10/26/big-data-brain-drain/