

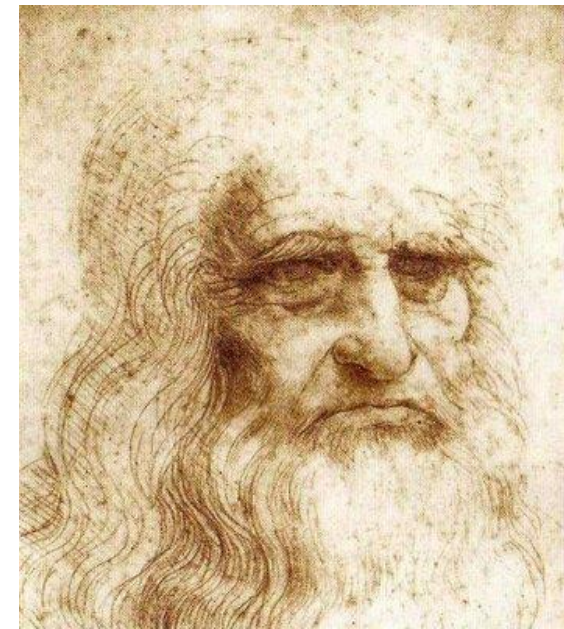
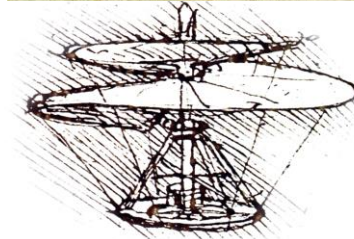
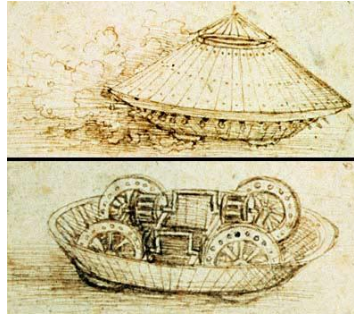


Hvordan kan du som leder legge til rette for god forskning?

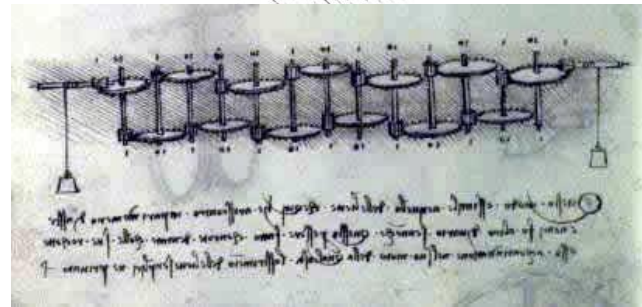
NTNUs Ledermøte Oppdal 24-25 januar 2017

Jostein Mårdalen
Institutt for materialteknologi

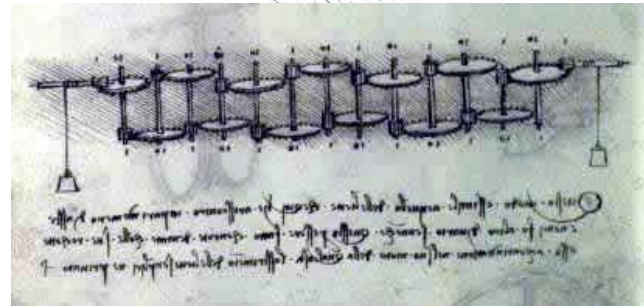
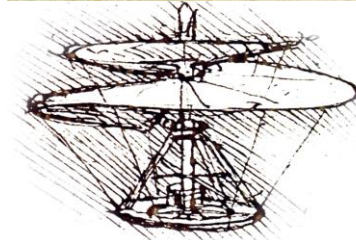
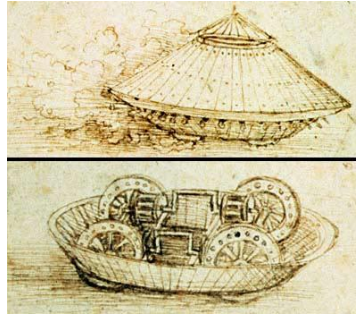
Universalgeni



- malerkunst og arkitektur
- astronomi
- paleontologi og anatomi
- geometri og matematikk
- Fysikk, dynamikk
- Ulike oppfinnelser



Universalgenienes tid er forbi

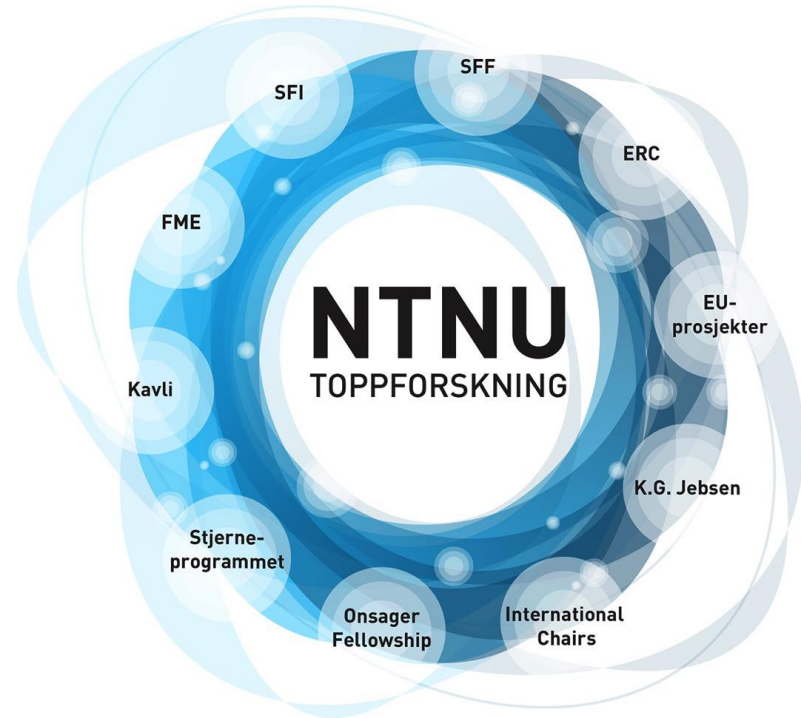


Tverrfaglige prosjekt

- malerkunst og arkitektur
- astronomi
- paleontologi og anatomi
- geometri og matematikk
- Fysikk, dynamikk
- Ulike oppfinnelser

Strategi – langsiktig plan

- Hvor er vi?
- Hvor vil vi?
- Hvordan kommer vi dit?



Strategi – på ulike nivå

- Internasjonale utfordringer – de store utfordringene
- Nasjonale strategiske satsinger
- NTNUs strategi
- Fakultetsstrategi
- Instituttstrategi
- **Gruppestrategi** (faggruppe, forskningsgruppe)
- den enkeltes kompetanse og ambisjon



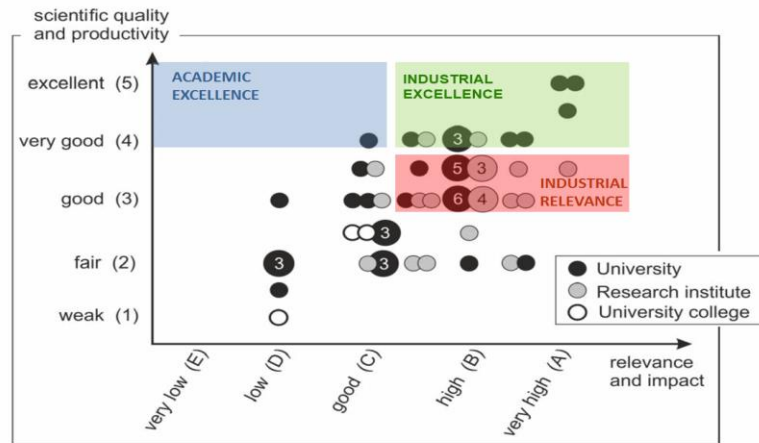
Gruppestrategi

Valg av forskningsfelt

- Globale trender
- Nasjonale prioriteringer
- Egen kompetanse

Hvor har vi best sjanser til å lykkes?

- Akademisk spesialisering(excellence)
- Industrierorientering / næringsrelevans
- Samlingspunkt / nav (nasjonalt eller internasjonalt)
- Koordinering av store satsinger
- Tverrfaglige satsinger / forskningsallianser
- Internasjonalisering (EU, o.a.)
- ...



Nøkkelspørsmål:

Hvordan øker vi våre sjanser for å lykkes?

Hva må vi forsterke?

Hvordan kan vi som ledere øke sjansene for å lykkes i forskning?

- Strategi (alt begynner med strategi)
- Personer (vår viktigste ressurs):
 - Strategiske ansettelses (lete – finne komité, nettverk, ...)
 - Onsager, Marie Curie (MSCA), ...
 - PhD, PD eller faste stillinger?
 - Kjønnsbalanse, mangfold, komplementaritet,
 - Utviklingsprogram (mentor, Stjerneprogrammet, kursing, coaching)
 - Definere roller og arbeidsoppgaver i ei gruppe
 - Differensiering og spesialisering



Hvordan kan vi som ledere øke sjansene for å lykkes i forskning? (forts.)

- Støtte til gode søknader
 - Utforming av og oversikt over utlysninger innen relevante fagområder
 - Allokering av tid
 - Tvunget tidsskjema
 - Gode administrative støttefunksjoner, (LP: budsjett, kontrakt, IPR, ...)
 - Faglig kvalitetssikring
- Strategisk utvikling av våre laboratorier / infrastruktur
 - Gode laboratorier / infrastruktur; et forskningsmessig fortrinn
 - Egne laboratorier, nasjonal infrastruktur, internasjonal infrastruktur
 - Utnytte finansieringsmulighetene (Forskningsrådet, AVIT, fakultetssatsinger, instituttfinansiering, leiestedsfinansiering)

Oppsummering: Hvordan lykkes vi ?

Flaks

De rette folkene

De rette samarbeidspartnerne

Den rette forskningsinfrastrukturen

De rette prosjektene

Den rette timingen

Mer flaks

Til ytterligere inspirasjon:



EDITORIAL

Ten Simple Rules to Win a Nobel Prize

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Preface

by Philip E. Bourne, National Institutes of Health, Founding Editor-in-Chief of *PLOS Computational Biology*

When receiving a draft of the article "Ten Simple Rules for Writing a PLOS Ten Simple Rules Article" [1], not only had we come full circle in terms of professional development, but also I knew the series was a success. Since that article was published in October 2014, two more articles have been published, and this will be the third: a total of 44 in all. Rule 2 in what I shall affectionately call the 102 article [1] suggested you need a novel topic and suggested winning a Nobel Prize was such a topic. As I hinted in my editorial comments to the 102 article, I would take up the challenge in soliciting such an article. Rich Roberts was the first person to come to mind, partly because he is a good sport, partly because we share an interest in open (to be interpreted here as candid) science, and of course because he won the Nobel Prize in Physiology or Medicine (with Philip Sharp) in 1993 for work on gene structure.

At first he was reluctant and slightly insulted, making me think I should write "Ten Simple Rules for How Not to Insult a Nobel Laureate." The rationale is that we should not be encouraging scientists to think about science through awards but through having fun and the desire to do their best science. That should be enough. The result is exactly that—having a bit of fun and making some important points all at once. I hope you enjoy it as much as I did.

1. <http://www.ploscollections.org/article/doi/10.1371/journal.pcbi.1003858>



OPEN ACCESS

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Introduction

It is remarkable how many students, young faculty, and even senior faculty hanker after a Nobel Prize. Somehow, they think that it is possible to structure their scientific careers so that the culmination will bring this much sought-after honor. Some even think that as a Nobel laureate myself, I may have the key to success—some secrets that I can share and so greatly improve their odds of success. Unfortunately, I must begin by disappointing everyone. There is only one path that should be followed. It is summed up in Rule 1, but some of the other Rules may prove helpful—or if not helpful, then at least amusing.