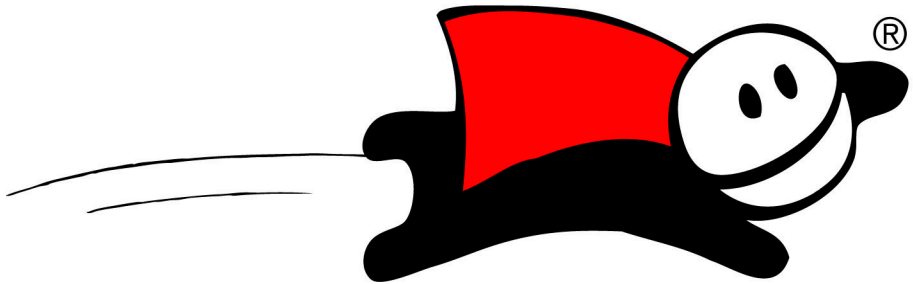

Camilla Kring, PhD

Founder, Super Navigators

ck@supernavigators.com

CAMILLA KRING

- Founder, Super Navigators ApS
- M.Sc. in Engineering
- PhD in Work-Life Balance
- Clients in 17 countries; EU, China, Latin America & Middle East
- TEDx speaker & author of 5 books

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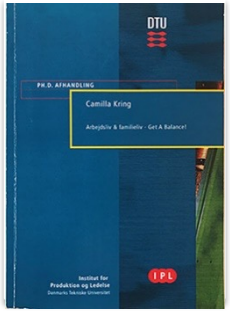

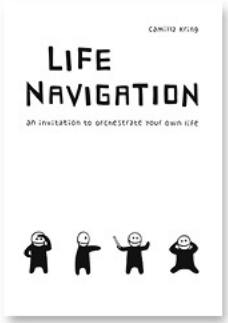

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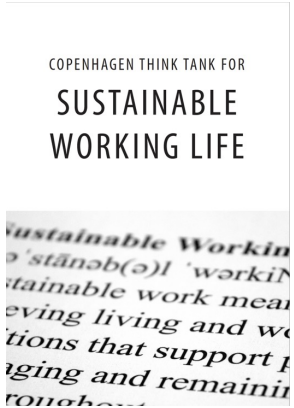
TÆNKETANKEN FREMTIDENS ARBEJDSLIV

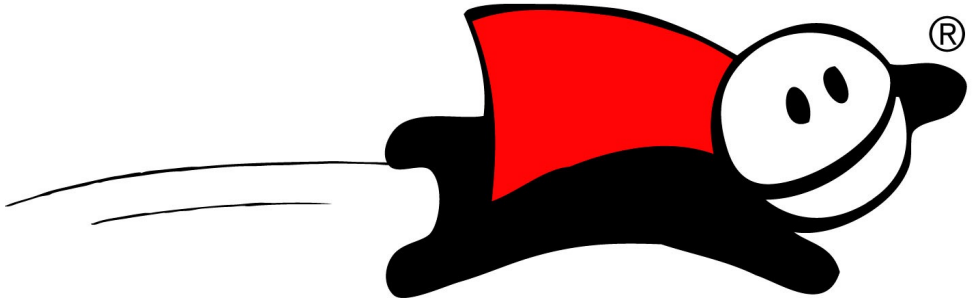
Arbejdslivet og organisationer er under uforudsigelig forandring. Hvis organisationer og ledere vil tiltrække, udvikle og fastholde ansatte, er det bydende nødvendigt, at de får forståelse for og greb om de nybrud og tendenser, som netop nu skaber fremtidens arbejdsliv.

Tænketanken Fremtidens arbejdsliv stiller spørgsmål ved arbejdslivet sammen ledere, beslutningstagere, arbejdsmiljøprofessionelle, etc. som ønsker at være på forkant med strømninger og modstrømninger, som former fremtiden.



Super Navigators

- Founded in 2005 with the purpose to combine productivity with high degree of life quality in organisations.



Abbott

abbvie

- Denmark
- Norway
- Netherlands
- Ireland
- Area (France)
- Germany
- Logistics
- Austria

Roche

- Denmark
- Norway
- Sweden
- Finland
- Poland
- Netherlands
- China

novo nordisk®

Medtronic

- Denmark
- Norway
- Sweden
- Finland
- Germany
- Poland
- Austria
- Belgium
- Schweiz
- Greece
- Israel

super navigators®

AbbVie Denmark

- Number 1 in the Great Place to Work competition in 2011 and 2017
- Work-Life Balance satisfaction increased from 39% to 95%
- Employee turnover decreased from 31% to 10%
- 300% increase in non-solicited CVs (2007-2008)
- 50% reduction in recruitment costs.

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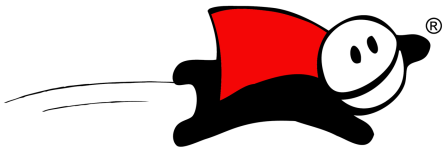
LIFE NAVIGATION CONCEPT

15 hours of training course

sustainable work culture
and better balance
between work and life



1. OVERVIEW

the timekeeper. control your time.

2. FOCUS

the pilot. set direction.

3. RHYTHM

the conductor.
discover your biological rhythm.

4. CALMNESS

the space creator. choose the right surroundings.

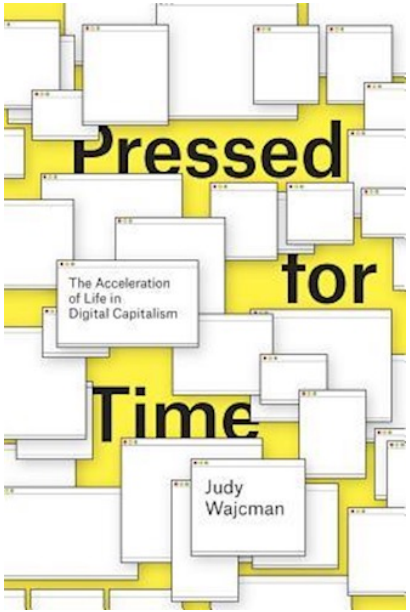
5. SUPER NAVIGATOR

to live is to navigate

Work Culture 2023

- Flexible. Autonomy over time.
- Inclusive.You can be you and I can be me.
- Sustainable. I can stay healthy.

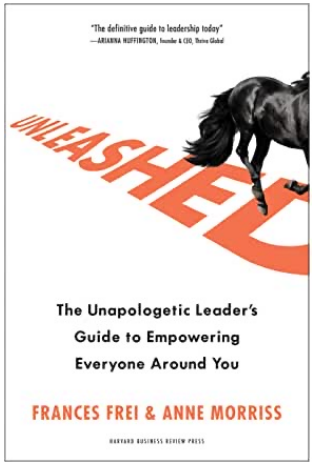
Autonomy over time

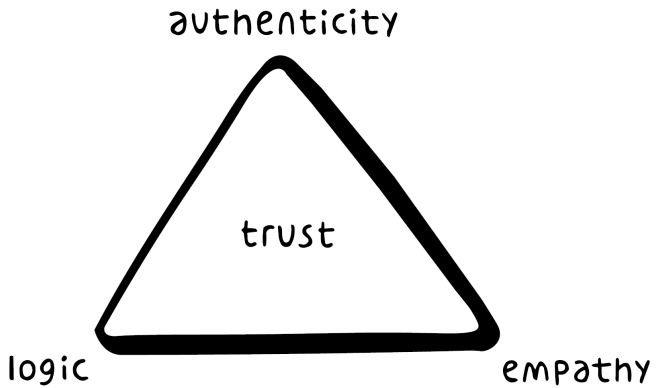


“How people spend their time matters for quality of life. **To have control or autonomy of your time is a significant measure of life satisfaction and well-being**.”

super navigators

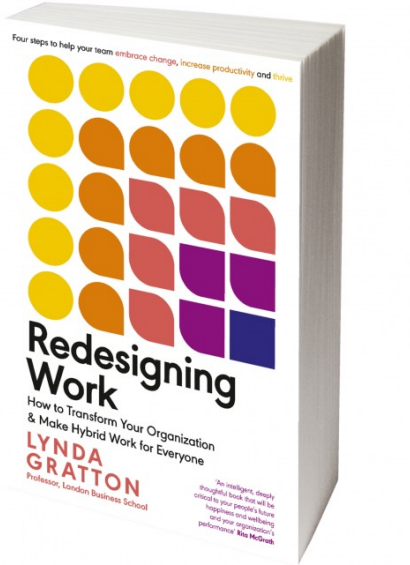
Inclusive





- Foster belonging = appreciate everyone for who they truly are.

Sustainable



“As people make choices about where they work and how they work, one of the big factors they will take into consideration is whether working for your company will help them stay healthy”.

super navigators

The history of time

1283

Morning bells are ringing!
Ding
Dang
Dong

super navigators

Køln, 1374-1398

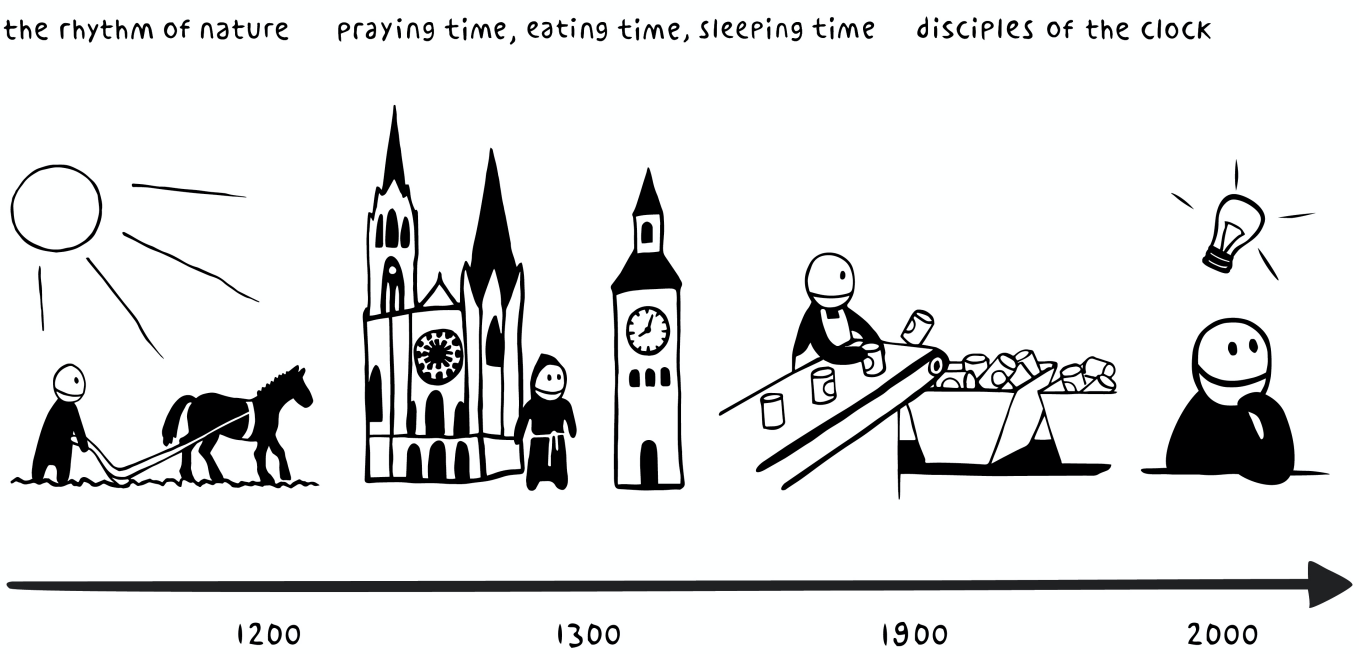
”In one generation, people in Køln went from never quite knowing what time it was, to a clock dictating, when they were supposed to work, how much time they could spend on eating lunch, and when they were supposed to go home every evening. The clock time won over the natural time.”

(Honoré, 2006)

super navigators

Industrial bells system

The Power over Time



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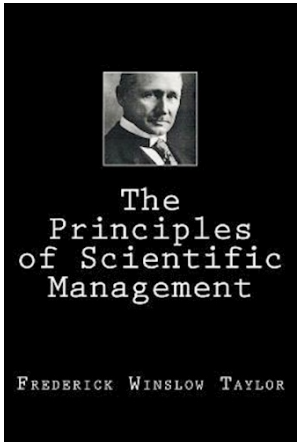
From farm to factory



1200 1300 1900 2000

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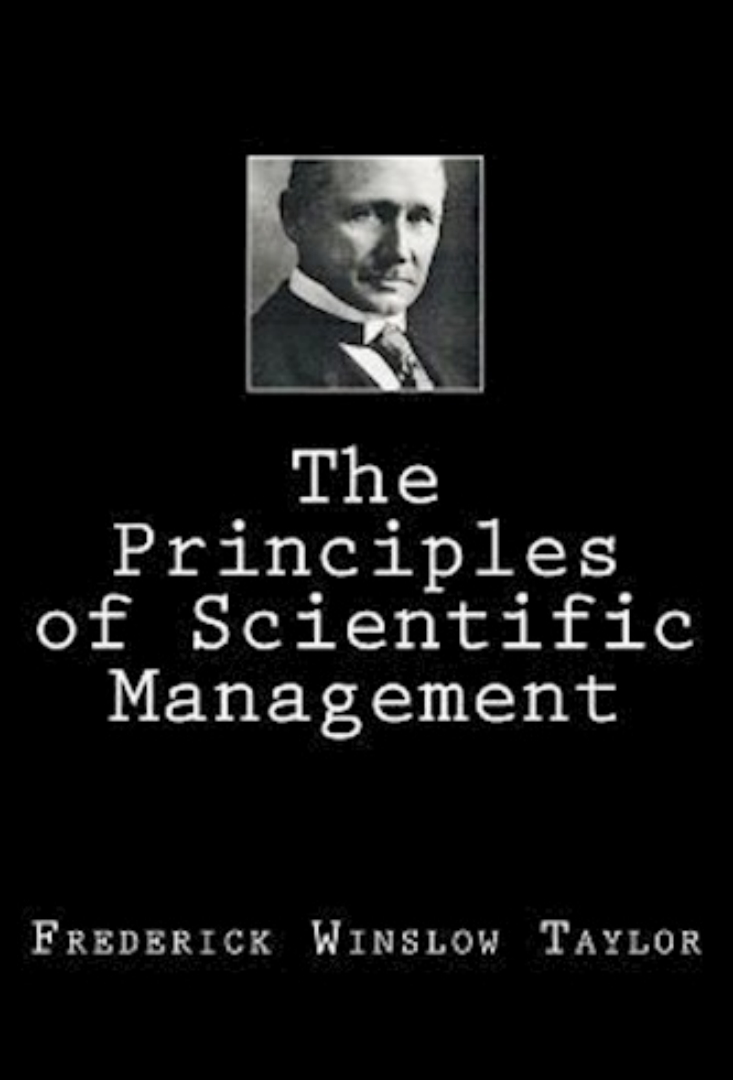


The industrial time system

- ”In 1878, a machinist at a Pennsylvania steelworks noticed that his crew was not producing nearly as much as he thought they could.”
- Frederick Winslow Taylor developed a set of principles that aimed to improve efficiency and productivity in the workplace.

HBR IdeaCast: Scientific Management

super navigators

The time taken to assemble a Ford T:
1913: 12,5 hours
1914: 93 minutes

Price:
1909: USD 950
1916: USD 360

Industrial Work

8

Hour Workday

80

Percent of a company's value is tangible

Knowledge Work

?

80

Percent of a company's value is intangible

How to use the knowledge of chronobiology to create healthier, more sustainable and more productive rhythms of the workplace.

2003

super navigators

Sleep. 2003 Jun 15;26(4):413-5. doi: 10.1093/sleep/26.4.413.

A length polymorphism in the circadian clock gene Per3 is linked to delayed sleep phase syndrome and extreme diurnal preference

Simon N Archer [1], Donna L Robilliard, Debra J Skene, Marcel Josephine Arendt, Malcolm von Schantz

Affiliations + expand

PMID: 12841365 DOI: 10.1093/sleep/26.4.413

Free article

Abstract

Study objectives: To investigate the link between extreme di phase syndrome, and a length polymorphism in Per3.

Design: Subjects were genotyped using polymerase chain re

Patients or participants: Subjects with defined diurnal prefe Ostberg questionnaire and patients with delayed sleep phase

Measurements and results: The Per3 polymorphism correla preference, the longer allele associating with morningness an The shorter allele was strongly associated with the delayed sl of whom were homozygous.

Conclusion: The length of the Per3 repeat region identifies a diurnal preference.

J Biol Rhythms. 2003 Feb;18(1):80-90. doi: 10.1177/0748730402239679.

Life between clocks: daily temporal patterns of human chronotypes

Till Roenneberg [1], Anna Wirz-Justice, Martha Merrow

Affiliations + expand

PMID: 12568247 DOI: 10.1177/0748730402239679

Free article

Abstract

Human behavior shows large interindividual variation in temporal organization. Extreme "larks" wake up when extreme "owls" fall asleep. These chronotypes are attributed to differences in the circadian clock, and in animals, the genetic basis of similar phenotypic differences is well established. To better understand the genetic basis of temporal organization in humans, the authors developed a questionnaire to document individual sleep times, self-reported light exposure, and self-assessed chronotype, considering work and free days separately. This report summarizes the results of 500 questionnaires completed in a pilot study individual sleep times show large differences between work and free days, except for extreme early types. During the workweek, late chronotypes accumulate considerable sleep debt, for which they compensate on free days by lengthening their sleep by several hours. For all chronotypes, the amount of time spent outdoors in broad daylight significantly affects the timing of sleep: Increased self-reported light exposure advances sleep. The timing of self-selected sleep is multifactorial, including genetic disposition, sleep debt accumulated on workdays, and light exposure. Thus, accurate assessment

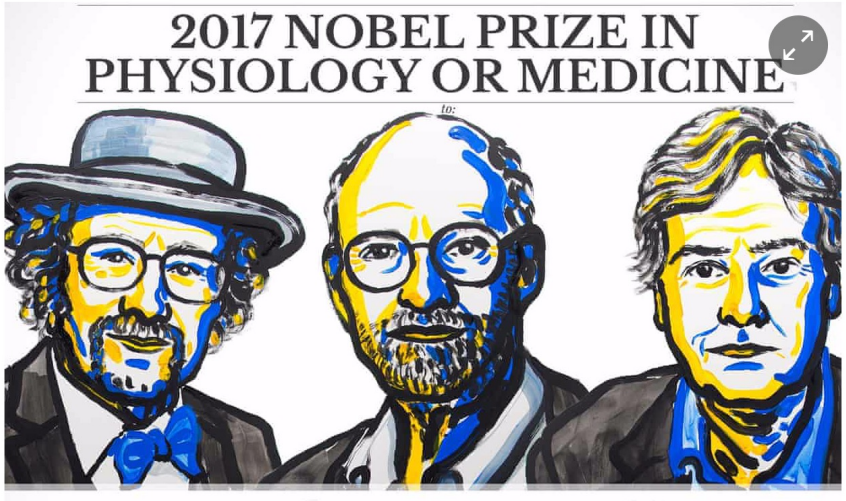
Nobel prizes

Nobel prize for medicine awarded for insights into internal biological clock

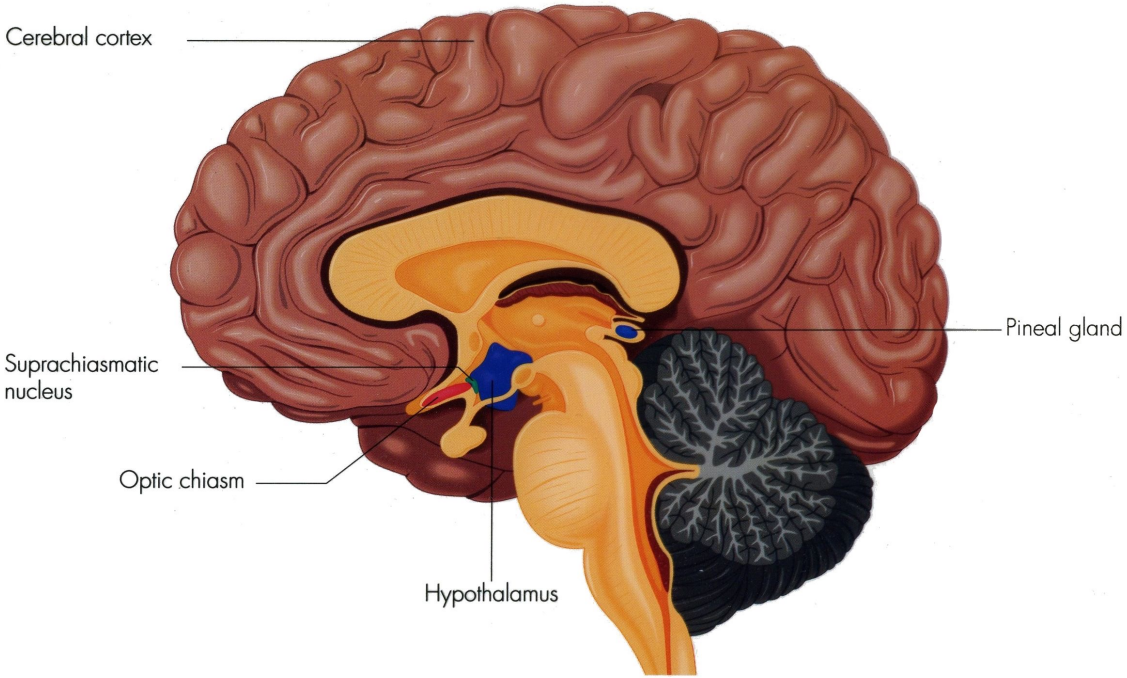
£825,000 prize shared between American scientists Jeffrey C Hall, Michael Rosbash and Michael W Young for work on the internal clock of living organisms

Nicola Davis *and* Ian Sample

Mon 2 Oct 2017
13.06 BST



Master clock = SCN



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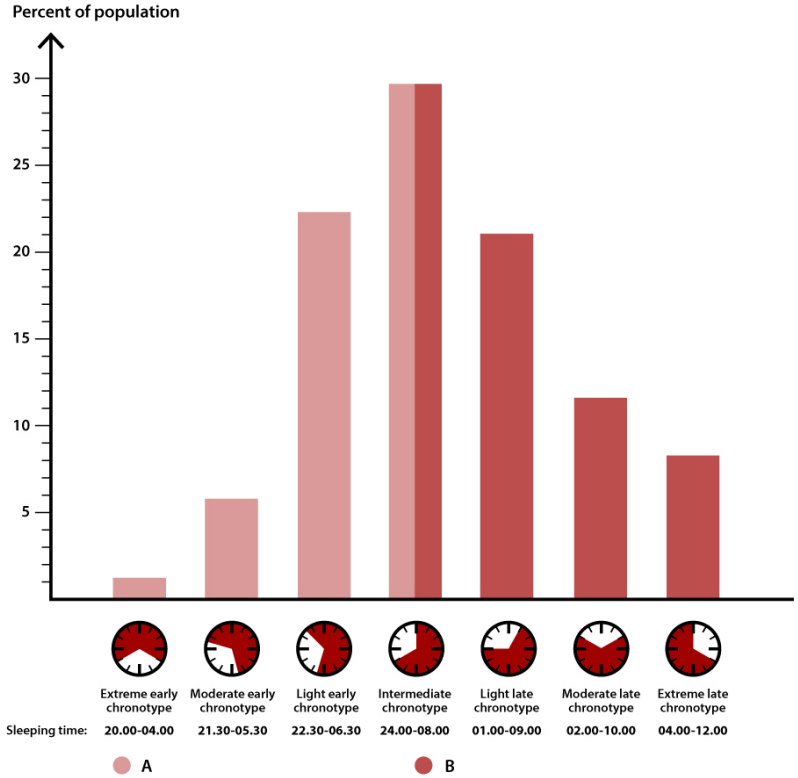
7 chronotypes



Extremely early: 1,2%
Moderately early: 5,9%
Slightly early: 22,2%
Intermediate: 29,8%
Slightly late: 21,0%
Moderately late: 11,7%
Extremely late: 8,2%

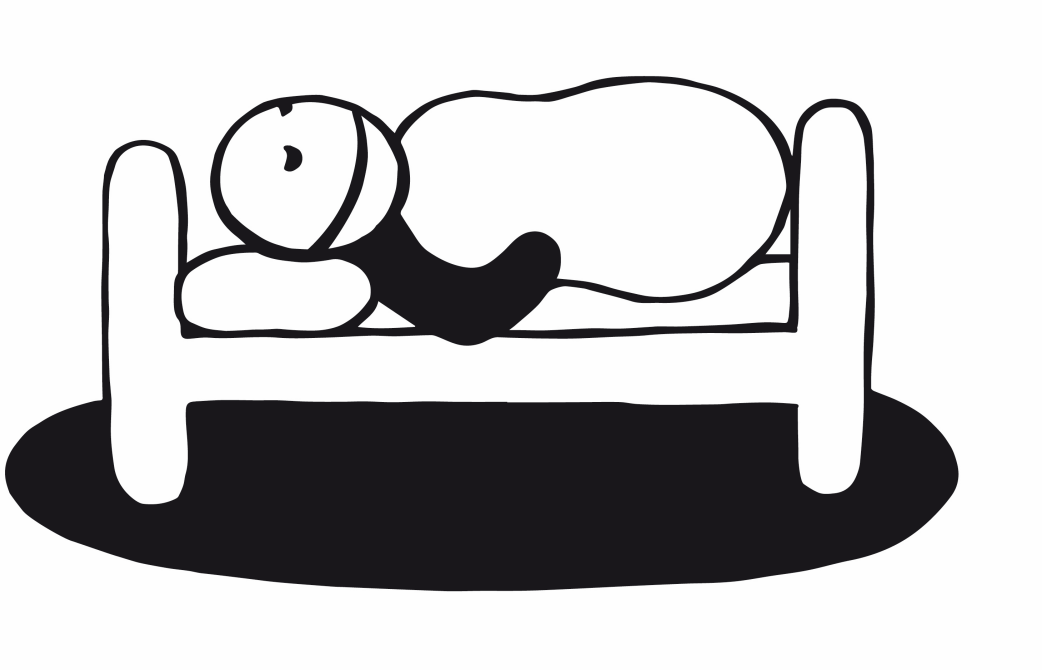
MCTQ database 2017. N=290.000

Roenneberg T et all: Chronotype and Social Jetlag: A (Self-) Critical Review. Biology (Basel). 2019 Jul 12;8(3):54..

super navigators

Do you get enough sleep?

80% of the population needs an alarm clock to wake up



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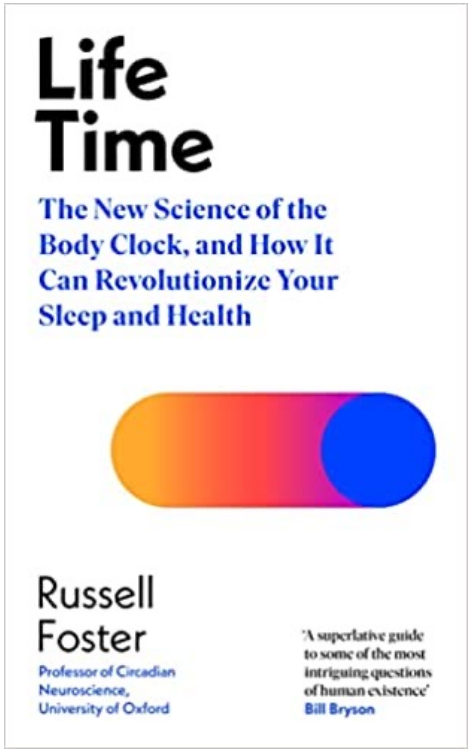


”Living out of sync with your biological clock is not only disrupting our sleep, but leaving us more vulnerable to infection, cancer, obesity, type 2 diabetes, heart disease and mental illness.”

super navigators

PUBLIC RELEASE: 12-APR-2018

Night owls have higher risk of dying sooner

Evening types have 10 percent higher risk of dying than morning counterparts

NORTHWESTERN UNIVERSITY

SHARE PRINT E-MAIL

- First study to show 'owls' have higher risk of mortality
- Switch to daylight savings time is much harder for them
- They suffer from more diseases and disorders than morning larks
- Employers should allow greater flexibility in working hours
- Consider abolishing daylight savings time, scientists say

CHICAGO --- "Night owls" -- people who like to stay up late and have trouble dragging themselves out of bed in the morning -- have a higher risk of dying sooner than "larks," people who have a natural preference for going to bed early and rise with the sun, according to a new study from Northwestern Medicine and the University of Surrey in the United Kingdom (UK).

The study, on nearly half a million participants in the UK Biobank Study, found owls have a 10 percent higher risk of dying than larks. In the study sample, 50,000 people were more likely to die in the 6½ -year period sampled.

"Night owls trying to live in a morning lark world may have health consequences for their bodies," said co-lead author Kristen Knutson, associate professor of neurology at Northwestern University Feinberg School of Medicine.

Previous studies in this field have focused on the higher rates of metabolic dysfunction and cardiovascular disease, but this is the first to look at mortality risk.

Media Contact

Marla Paul
marla-paul@northwestern.edu

@northwesternu

http://www.northwestern.edu

More on this News Release

Night owls have higher risk of dying sooner
NORTHWESTERN UNIVERSITY

JOURNAL
Chronobiology International

FUNDER
National Institutes of Health, University of Surrey Institute?of Advanced Studies

KEYWORDS

DEATH/DYING | DIABETES | MEDICINE/HEALTH | MENTAL HEALTH | METABOLISM/METABOLIC DISEASES | MORTALITY/LONGEVITY | SLEEP/SLEEP DISORDERS

Scientists reveal how internal biological clock may suppress tumor growth

New discovery helps explain how disruption to daily biological rhythms could lead to increased risk of cancer.

July 01, 2021

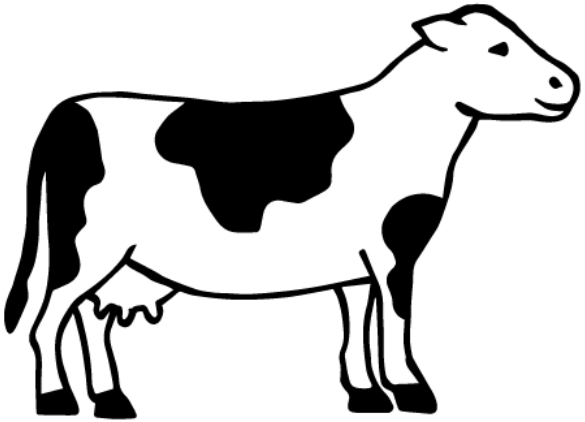
LA JOLLA, CA—Those who engage in long-term, rotational shift work, such as nursing or firefighting, are at increased risk of developing cancer, but the biological roots of this phenomenon have remained largely unknown.

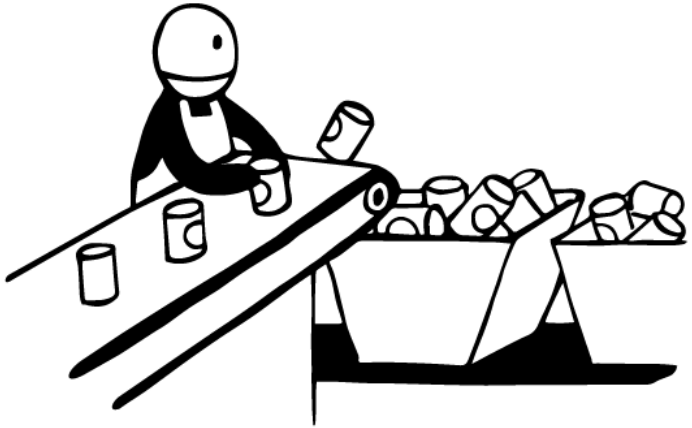
Become aware of the norms, stereotypes and beliefs that characterise your thinking about circadian rhythms.

To change normative attitudes about when a school and work day begins and ends for the benefit of society as a whole.

super navigators

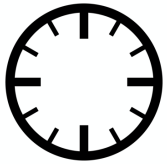
From cow to computer





Morgenstund hat Gold im Mund
The early bird catches the worm
À qui se lève matin, Dieu aide et prête la main
Chi dorme non piglia pesci
A quien madruga Dios le ayuda
早起的鳥兒有蟲吃

super navigators



ChronoWork

- Global work. Match circadian clocks with time zone work.
- Team work. Visualize your team’s work rhythms.
- Shift work. Plan work hours to match the circadian rhythms of the employee.
- Working 24/7. Create sustainable working hours.

super navigators

Individual

- Test your chronotype: https://chronotype-self-test.info
  RNA-test: https://www.bodyclock.health/
- Get daylight before 12:00
- Download the free app ”Lightmeter” and measure how many lux you have at home and at work.

1	Light from a candle at a distance of one metre
300-400	Interior lighting at home and in the office
3000	Early morning exterior light
3000	Near a window
10.000	Outdoors on a cloudy day
100.000	Outdoors on a sunny day

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How you should work, sleep and exercise if you are an early chronotype (A)

- Get your most important and most complicated work tasks done in the morning or before noon. Do not waste time on emails in the morning.
- Listen to your rhythm. Go to bed early - even if it is only 20:30.
- Social activities can also be scheduled in the daytime hours. Try meeting with friends for some after work socialising or go to the cinema in the afternoon instead of at night.
- Exercise in the mornings or before noon. If you would like to lose weight, you can exercise in the morning before having breakfast.
- If you take a 30–45-minute walk after dinner, this can help regulate your blood sugar and thus help you lose weight.

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How you should work, sleep and exercise if you are an late chronotype (B)

- Complete your most important and most complicated tasks in the afternoon or evening.
- You thrive when working in the evenings but turn off your computer at least one hour before you go to bed.
- Exercise in the afternoons or early evenings. A research study shows that late chronotypes perform much better later in the day. In fact, the difference in performance when comparing the hours 7:00 to 22:00 is 26 per cent. In general, the muscle strength of owls peaks late in the afternoon and early in the evening. The advantage of exercising in the afternoon rather than before noon is that it can help prevent muscle injury, as the muscles are already warmed up.

super navigators

Team

- Map all the chronotypes in your team. Coordinate when it makes sense to work together and work alone.
- Circadian rhythm charts for all team members.

Example of a circadian rhythm chart

Name	Working hours	Sleeping hours	Exercise hours

super navigators

Organisation

- What includes and excludes early chronotypes (larks) from your work culture?
- What includes and excludes late chronotypes (owls) from your work culture?
- Avoid making sarcastic comments about each other’s working hours.

Society

1. Later starting times in schools.
2. Applied chronobiology in the healthcare system.
3. Collective agreement for different chronotypes.
   No night shifts for early chronotypes.

Plejehjem lader de ældre selv b...
www.bt.dk

B.T. KØB

SAMFUND 25. maj 2022 - 18:25

Plejehjem lader de ældre selv bestemme: 'Det er da virkelig et sted, jeg gerne ville blive gammel'

Forsker og debattør Camilla Krin... Vis mere

Friplejehjemmet, som ligger på Lolland med udsigt over Guldborgsund, er privatejet og har plads til 50 plejehjemsbeboere.

Og plejehjemmet kan ifølge forskeren noget ganske særligt. Det er nemlig indrettet efter beboernes individuelle døgnrytmer.

For eksempel får en pensioneret politimand, der vågner klokken 5.30, sin kaffe omkring det tidspunkt efter aftale med nattevagten, mens en 96-årig kvinde, der først vågner klokken 9.30, får sin morgenmad der.

»Det er one size fits one, frem for one size fits all, hvor vi alle skal passe ind i den samme rytme « siger Camilla Kring

https://www.supernavigators.com/

https://www.linkedin.com/in/camillakring/