



One brain, one health, one life

The Swiss Brain Health Plan

SSPH+ Annual Meeting, Bern, June 4, 2025

Prof. Claudio L. A. Bassetti, FEAN
Chair, Swiss Brain Health Plan
Medical Faculty, University of Bern
Neurology Department, Inselspital, Bern



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Swiss Brain
Health Foundation

Disclosures Claudio L.A. Bassetti 2023-5

Honoraria (consultancy/board memberships)

Takeda (2023-5)

Idorsia (2023)

Ente Ospedaliero Cantonale Ticinese (2025-)

Rehabilitationsklinik Zilschlacht (2023-)

Research fundings

Swiss National Science Foundation (2023-)

University of Bern (2023-)

Fees for educational events/conferences

Takeda (2024)

Boehringer Ingelheim (2024)



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Health Foundation

Brain and Mental Health Burden of Brain Disorders The Swiss Brain Health Plan Conclusions/Outlook



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Brain and Mental Health

Burden of Brain Disorders

The Swiss Brain Health Plan

Conclusions /Outlook

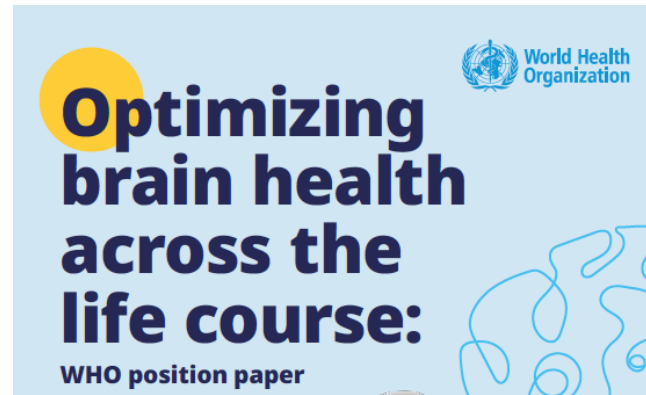


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Brain Health (2022-): WHO Definition



Brain health can be defined as the state of brain functioning across cognitive, sensory, social-emotional, behavioural and motor domains, allowing a person to realize their full potential over the life course, irrespective of the presence or absence of disorders.

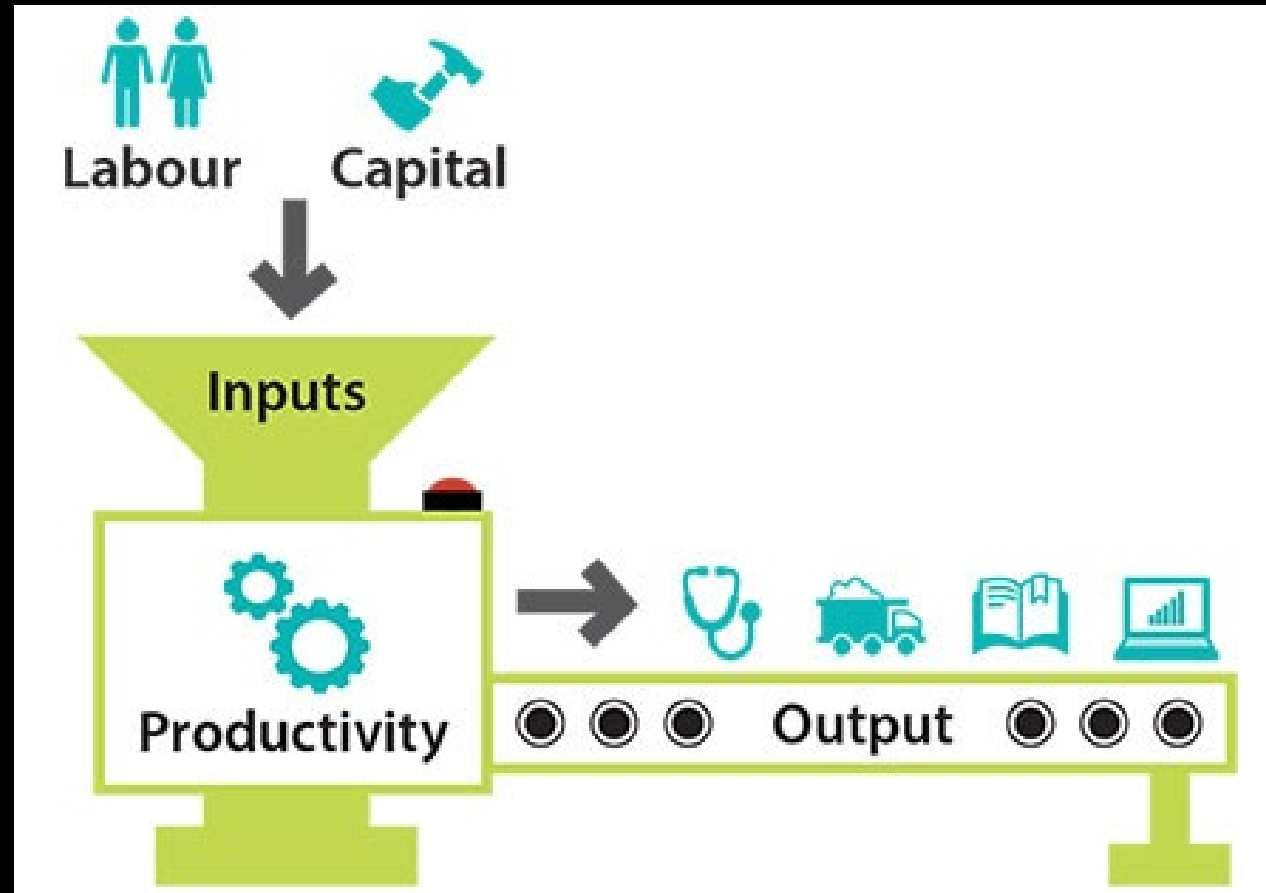
WHO Brain Health Position Paper, 2022

Brain health and Global health

**Brain health is
not only a crucial
outcome in and
of itself, but also
an important
mediator for
other health and
societal outcomes**

body health
mental health
well-being
creativity
productivity
social interactions

Brain skills are the human capital to transform our world



Courtesy: H. Eyre



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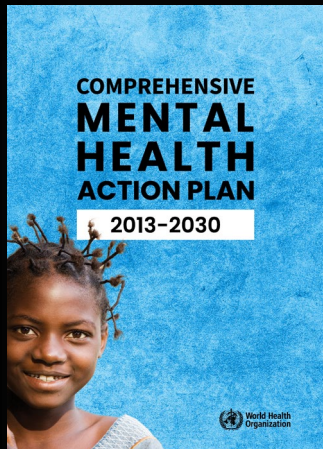
Mental Health (2001-): WHO Definition



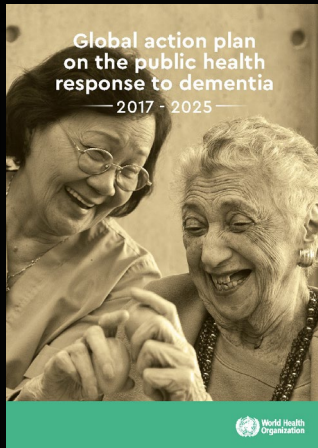
Mental health. *A state of mental well-being that enables people to cope with the stresses of life, to realize their abilities, to learn well and work well, and to contribute to their communities. Mental health is an integral component of health and well-being and is more than the absence of mental disorder.*

WHO Mental Health Report Paper, 2022

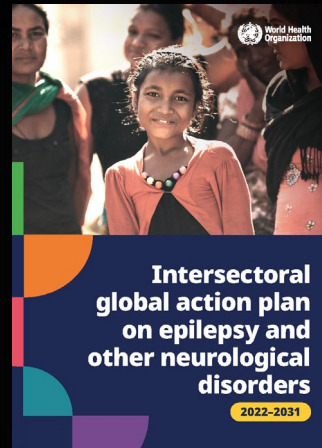
WHO Brain Plans



2013

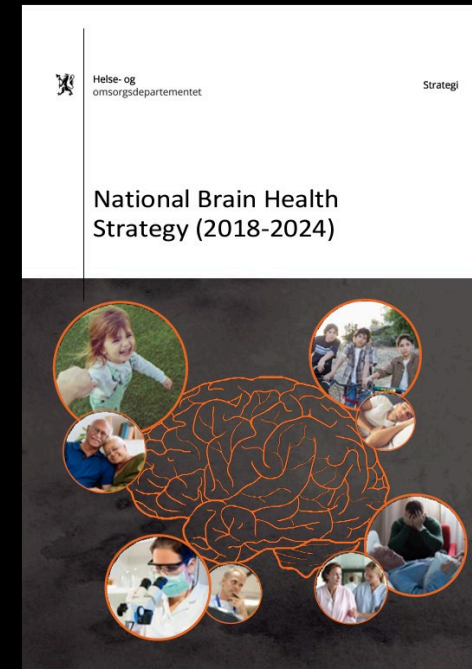


2017



2022

European Brain Health Plans EU Brain Health Partnership

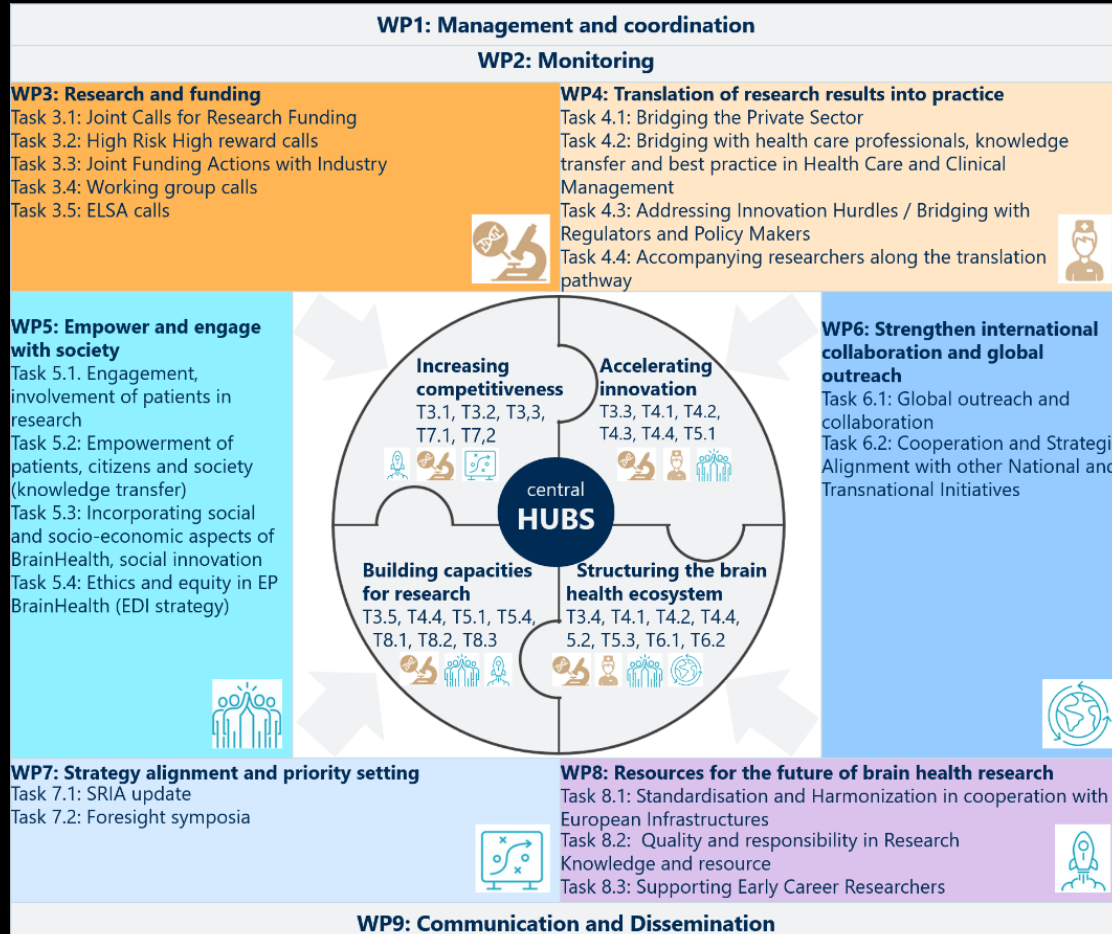


Norway, Sweden, Finland
Switzerland, Germany
Italy, Denmark, Poland





European Brain Health Partnership: Fundings 2026-2036



Wednesday, May 14th, 2025, Foresight Symposium
“Biological, social and environmental protective and risk factors that protect or threaten brain health across the lifespan”
 University of Latvia, Raina Bulv 19, Riga

Coordination	Germany (BMBF, DLR-PT)
Expected partners	Primarily national funding organisations (public or private)
Other participants	Researchers, healthcare providers/practitioners, patient organisations, the private sector, policymakers, regulators, citizens, etc.
Implementation mode	Co-funded European Partnership in the 2 nd Strategic Plan of „Horizon Europe“ (Cluster 1, Health)
Duration	10 years, starting in Q1/2026
Expected EU contribution	Max. 150 Mio. €, expected contributions of Member States / Associated Countries ~ 300 Mio. €



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Brain and Mental Health

Burden of Brain Disorders

The Swiss Brain Health Plan

Conclusions/Outlook

Burden of brain disorders (frequency, disability, costs, stigma, suffering)

Global, regional, and national burden of 12 mental disorders in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019

GBD 2019 Mental Disorders Collaborators*

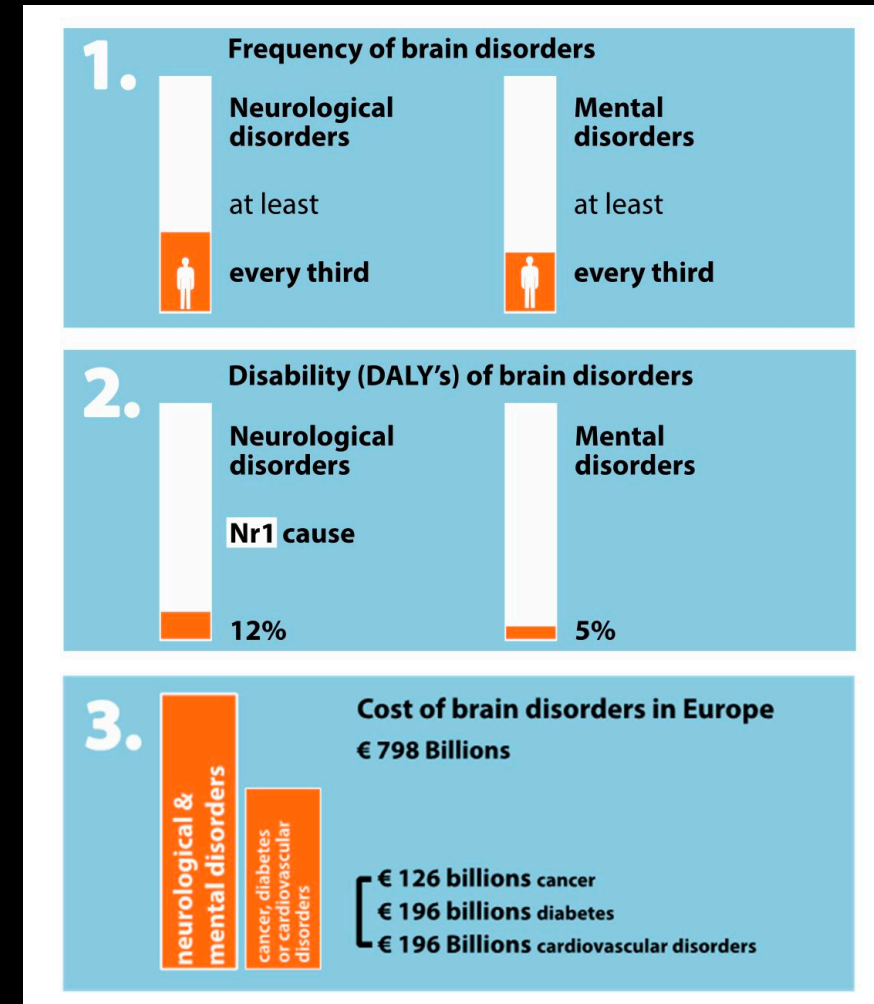
Global, regional, and national burden of disorders affecting the nervous system, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021

GBD 2021 Nervous System Disorders Collaborators*

GBD 2019, Lancet Psychiatry 2022; GBD 2021, Lancet Neurol 2024

High and increasing (women>men) burden due to:

- aging
- psychosocial stress, isolation
- COVID-19
- climate changes
- sleep loss
- addiction (social media, psychoactive drugs)



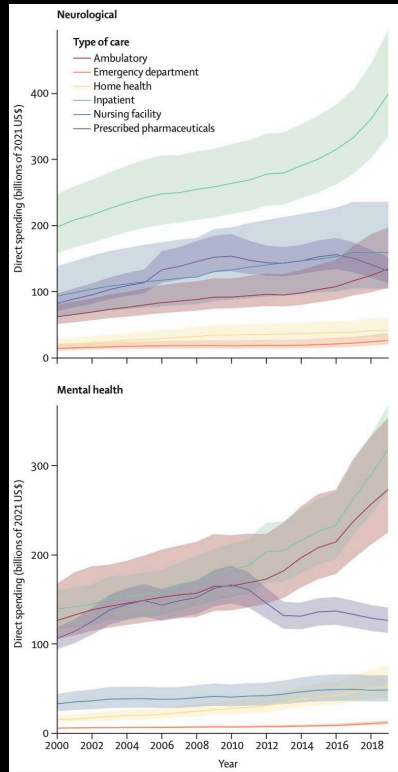
Bassetti, Eur J Neurol 2022; Bassetti, Clin Transl Neurosci 2023

Costs of Brain Disorders

Estimating global direct health-care spending on neurological and mental health between 2000 and 2019: a modelling study

A J Mitchell, Ian E Cogswell, Jeremy Dalos, Golsum Tsakalos, Jiali Lei, Andrei Oros, Quinn Rafferty, Serena Santoni, Xaviera Steele, Joseph L Dieleman, Angela E Apeagyei

Lancet Public Health 2025



Since 2000 increase
by 3% each year

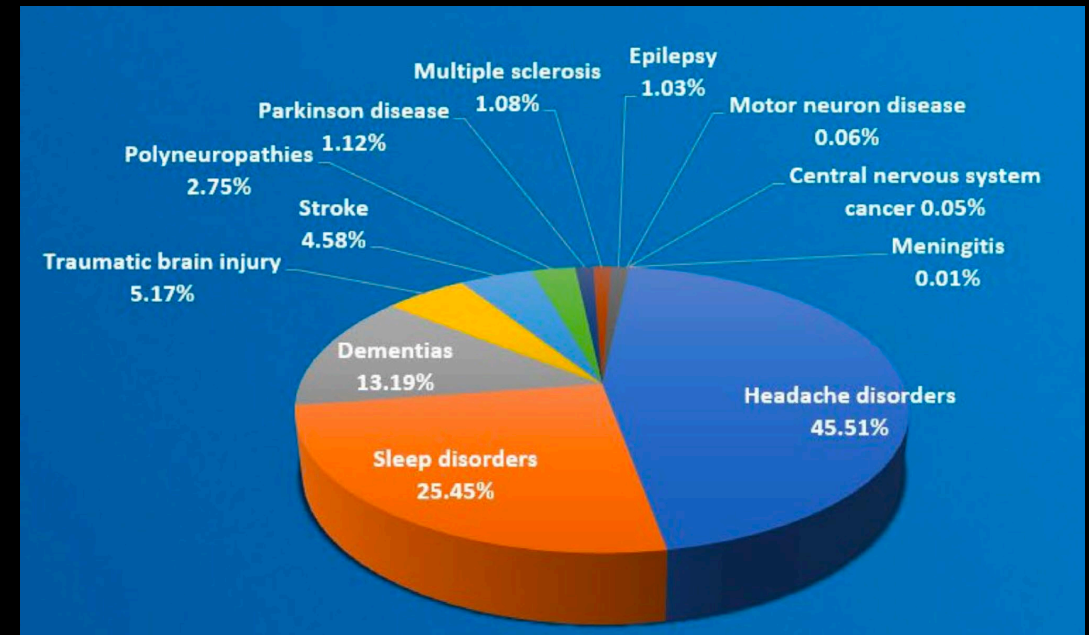
Neurological disorders
52% of direct costs

Mental disorders
48% of direct costs

A roadmap toward promoting and improving brain health in Europe and closing the awareness and funding gap

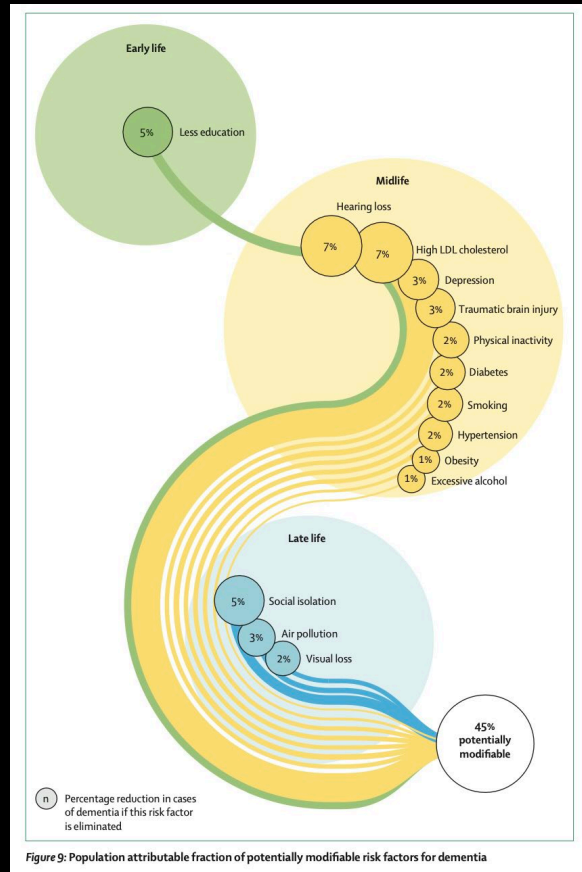
Paul A. J. M. Boon^{1,2,3} | Thomas Berger⁴ | Matilde Leonardi⁵ | Tony Marson⁶ | Ulf Kallweit⁷ | Elena Moro⁸ | Antonio Toscano⁹ | Irena Rektorova^{10,11} | Alice Accorroni¹² | Charlotte Scheerens¹³ | Antonia Boesch³ | Michael Crean³ | Anja Sander³ | Simon Lee³ | Claudio L. A. Bassetti¹⁴

Eur J Neurol 2025



Prevention of brain disorders

50% of **dementias** can be prevented



Livingston, Lancet 2024

50-80% of **strokes** can be prevented



American Heart Association, 2023

Prevention of stroke and dementia

Received: 31 January 2023 | Accepted: 12 April 2023
DOI: 10.1111/ene.15836

ORIGINAL ARTICLE

European Journal
of Neurology

Decreasing incidence of stroke, ischaemic heart disease and dementia in Norway, 1990–2019, a Global Burden of Disease study: an opportunity

Abolfazl Avan¹ | Anne Hege Aamodt^{2,3} | Geir Selbæk⁴ | Gunnar Bovim³ |
Claudio L. A. Bassetti⁵ | Paul Boon⁶ | Wolfgang Grisold⁷ | Vladimir Hachinski¹

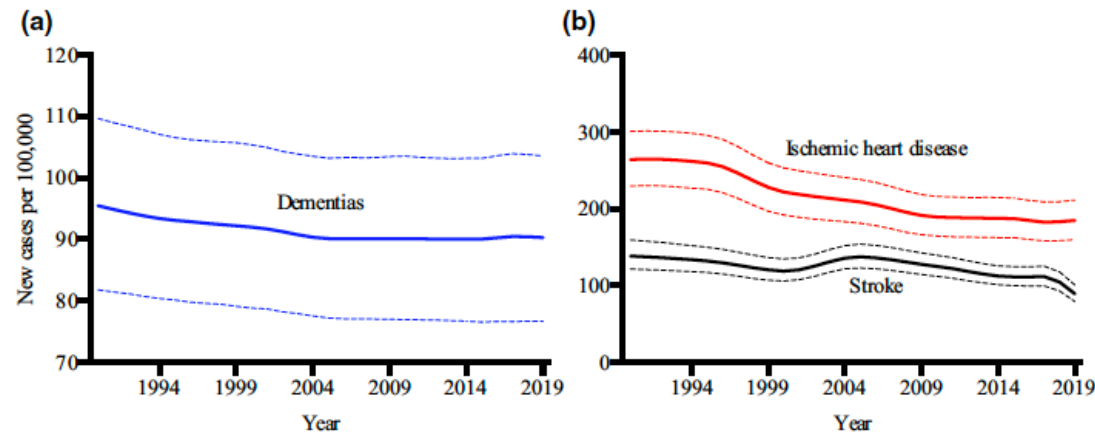
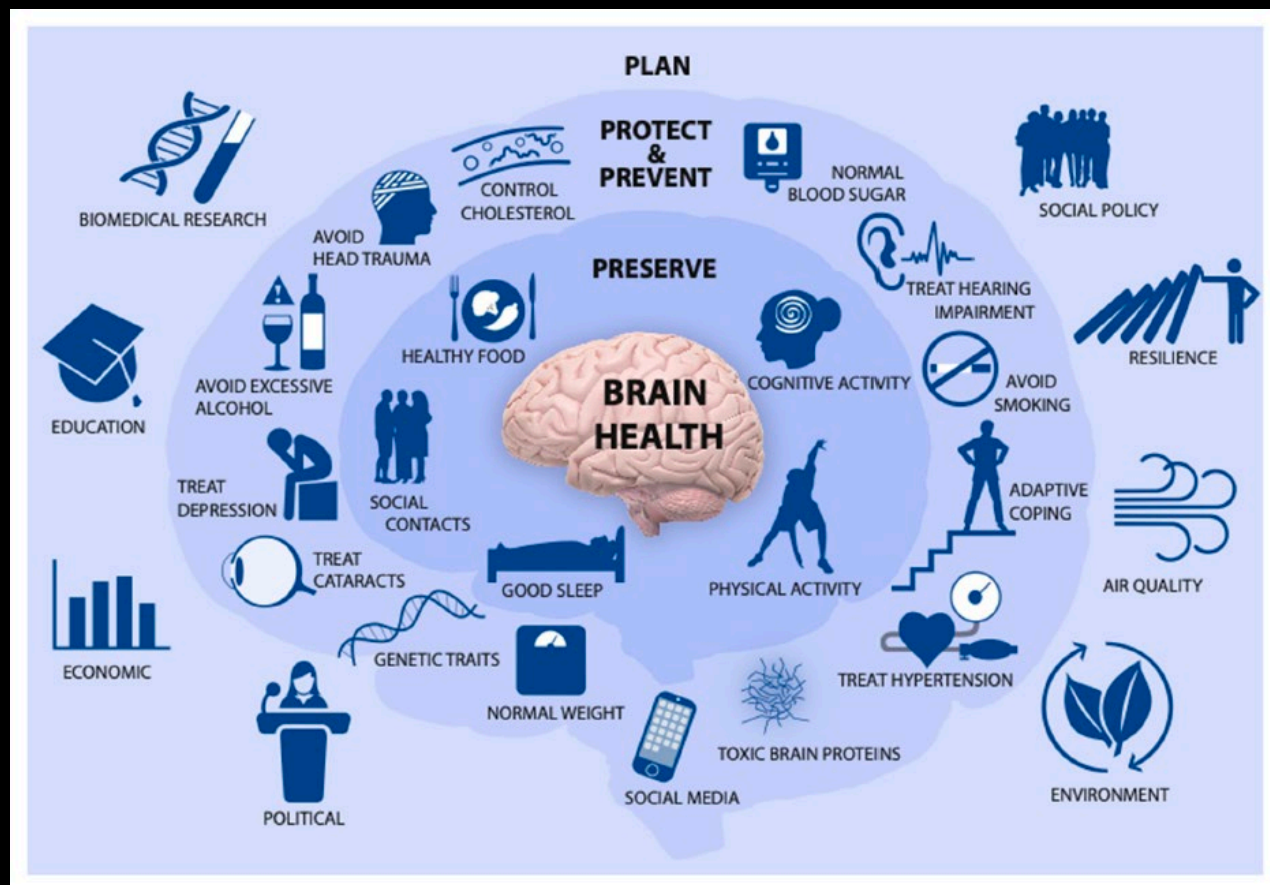


FIGURE 1 Trends of age-standardized incidence of (a) dementia and (b) ischaemic heart disease and stroke events per 100,000 population in Norway from 1990 to 2019. Mean values are shown with solid lines and 95% uncertainty intervals are shown with dotted lines above and below the solid line.

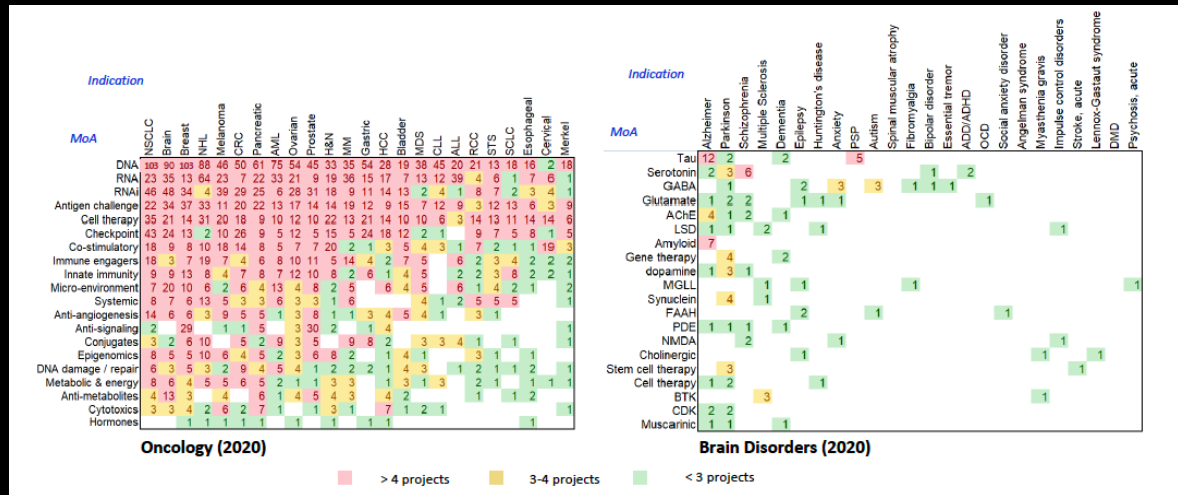
Brain Health determinants as targets for prevention



Brain-specific factors

General/non specific factors

Research trials 2020

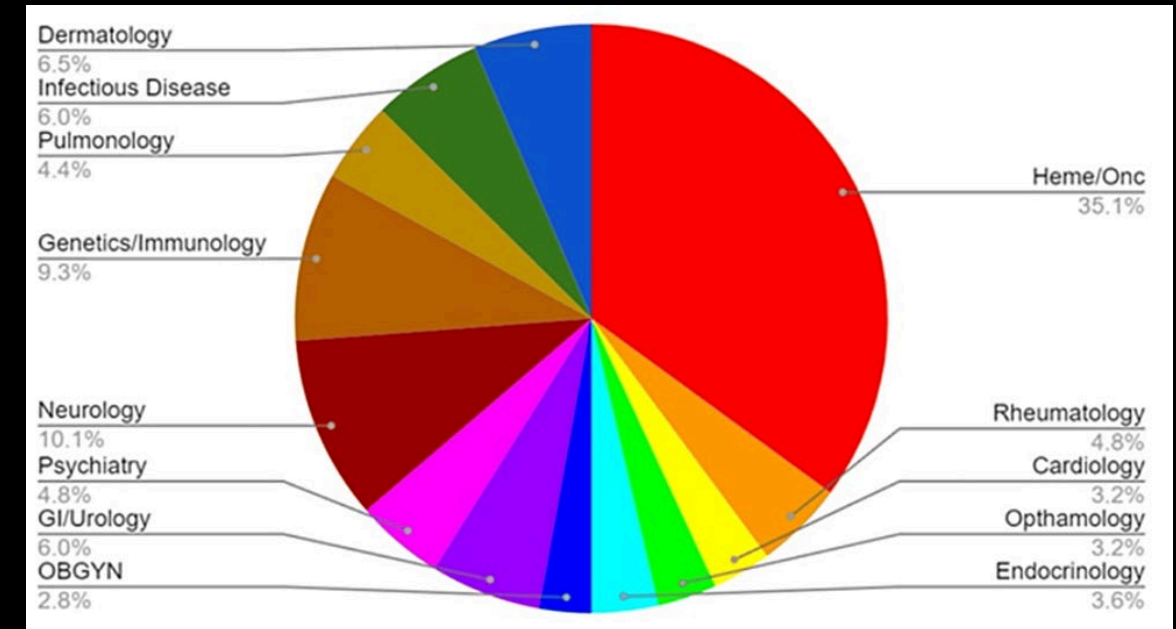


Oncological Dis.

Brain Dis.

New FDA approved drugs 2018-22

Giliberto, Cureus 2024



Neurology 10%, Psychiatry 5%, Oncology 35%



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Prendre soin du cerveau

Santé cérébrale Pour le groupe de travail Brain Health, la santé cérébrale est une priorité en matière de politique de santé. Car de plus en plus de personnes souffrent des conséquences de maladies neurologiques. Il s'agit d'un problème non seulement pour les personnes concernées et leurs proches, mais aussi pour la société. Le groupe de travail souhaite contrer cette évolution avec le «Swiss Brain Plan».

Dem Gehirn Sorge tragen

Hirngesundheit Für die Arbeitsgruppe Brain Health ist die Hirngesundheit eine gesundheitspolitische Priorität. Denn immer mehr Menschen leiden an den Folgen neurologischer Erkrankungen. Nicht nur für die Betroffenen und ihre Angehörigen, sondern auch für die Gesellschaft ist das ein Problem. Die Arbeitsgruppe möchte dieser Entwicklung mit dem «Swiss Brain Plan» entgegensteuern.

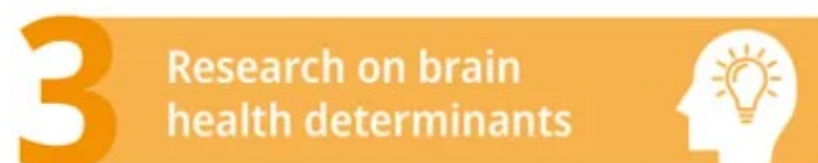
Bassetti, Schweiz Aerztezeitung 2022

Project Report

The Swiss Brain Health Plan 2023–2033

Claudio L. A. Bassetti ^{1,*}, Mirjam R. Heldner ¹, Kristina Adorjan ², Emiliano Albanese ³, Gilles Allali ⁴, Marcel Arnold ¹, Indrit Bëgue ⁵, Murielle Bochud ⁶, Andrew Chan ¹, Kim Q. do Cuénod ⁷, Renaud Du Pasquier ⁸, Bogdan Draganski ⁸, Mohamed Eshmaewey ⁹, Ansgar Felbecker ¹⁰, Urs Fischer ¹¹, Annika Frahsa ¹², Giovanni B. Frisoni ¹³, Harald Grossmann ¹⁴, Raphael Guzman ¹⁵, Annette Hackenberg ¹⁶, Martin Hatzinger ¹⁷, Marcus Herdener ¹⁸, Albert Hofman ¹⁹, Andrea M. Humm ²⁰, Simon Jung ¹, Michael Kaess ²¹, Christian Kätterer ²², Jürg Kesselring ²³, Andrea Klein ²⁴, Andreas Kleinschmidt ²⁵, Stefan Klöppel ²⁶, Nora Kronig ²⁷, Karl-Olof Lövblad ²⁸, Anita Lüthi ²⁹, Philippe Lyrer ¹¹, Iris-Katharina Penner ¹, Caroline Pot ⁸, Quinn Rafferty ³⁰, Peter S. Sandor ³¹, Hakan Sarikaya ¹, Erich Seifritz ¹⁸, Shayla Smith ³⁰, Lukas Sveikata ³², Thomas P. Südhof ³³, Barbara Tettenborn ³⁴, Paul G. Unschuld ⁹, Anna M. Vicedo Cabrera ¹², Susanne Walitza ³⁵, Sebastian Walther ², Isabel Wancke ³⁶, Michael Weller ³⁷, Susanne Wegener ³⁸, Petra Zalud ¹⁴, Thomas Zeltner ³⁹, Daniel Zutter ⁴⁰ and Luca Remonda ⁴¹

Bassetti et al., Clin Transl Neurosci 2023





Brain Health: „Time to close the great divide“

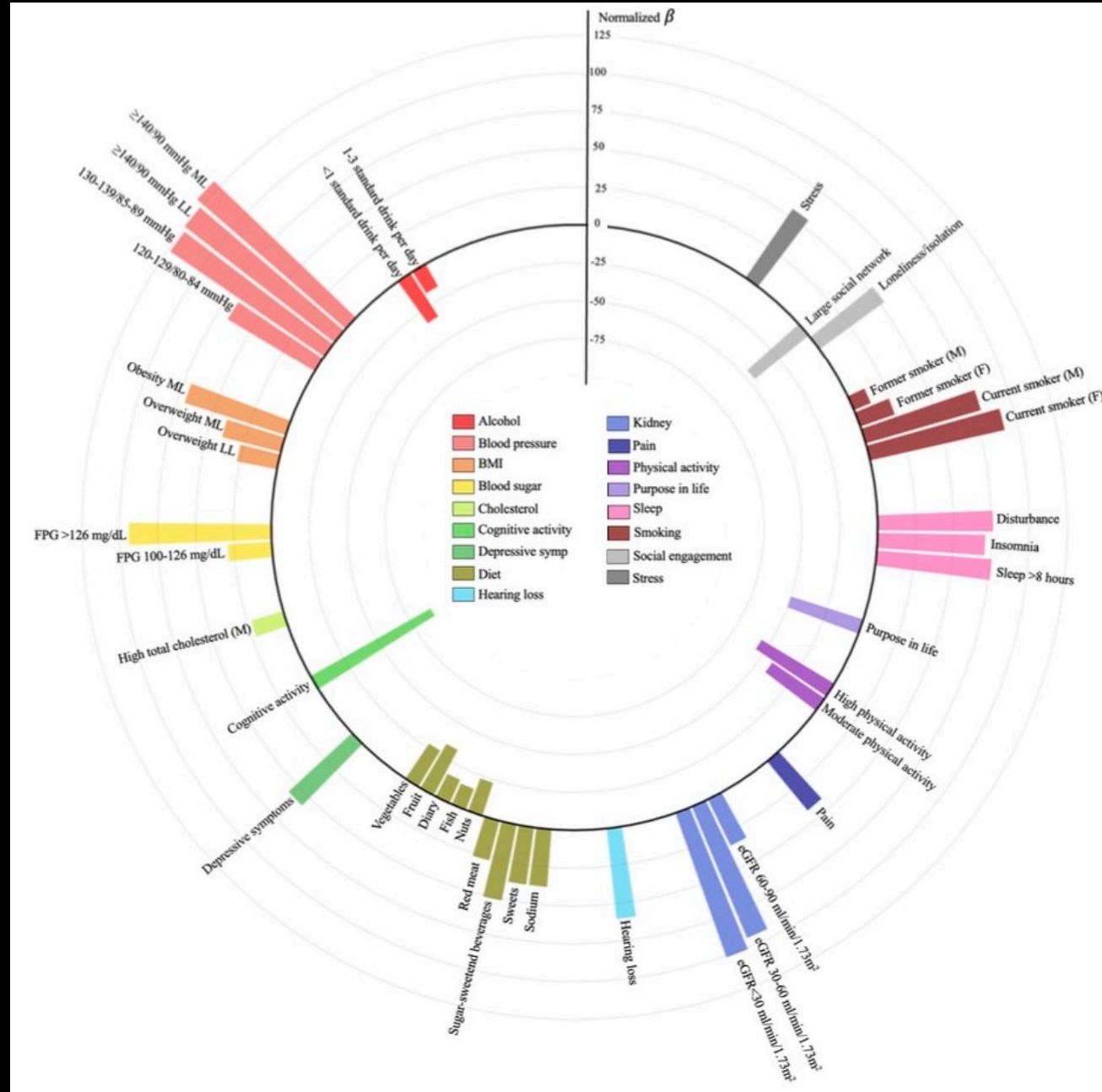
Brain health includes neurological and mental/psychiatric health

1. **Bio-psycho-social** factors/interactions are relevant for both
2. Progress in **neuroscience** (cognition, behavior, mental dis.) **methods** (MRI, omics, data science/AI)
3. **Borderlands** (headache, sleep, dementia, ADHD, Tic's/OCD, functional disorders)
4. **Comorbidities** (depression/anxiety and stroke, dementia, Parkinson; psychosis and Parkinson, narcolepsy)
5. Shared **risk factors** (head trauma, climate, sleep dis., diet, stress,..)

Shared risk factors

In stroke, depression, dementia

Sherf, J Neurol Neurosurg Psychiatry 2025

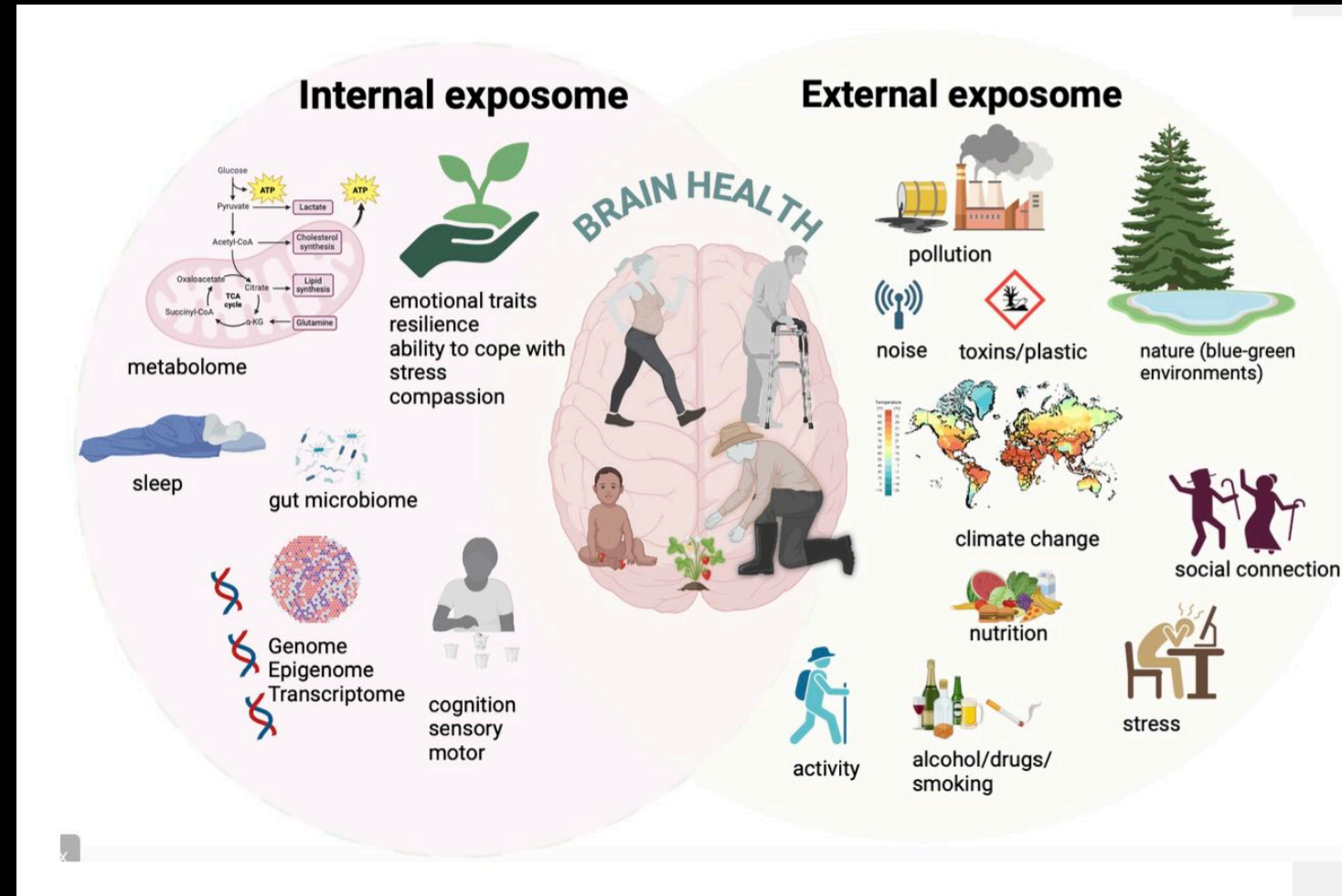


Brain, Global and One health

One brain, one mind, one health, one planet—a call from Switzerland for a systemic approach in brain health research, policy and practice

Indrit Bègue^{a,b,*}, Antoine Flahault^{c,d}, Isabelle Bolo^e, Rafael Ruiz de Castañeda^e, Ana Maria Vicedo-Cabrera^{e,f} and Claudio L. A. Bassetti^g

Bègue, Lancet Public Health 2024



Swiss Brain Health Plan: Implementations 2024-5



>10 national/international (UNO, EU, G7, WEF) **events**
MoU's with German and African Plans

University Postgraduate Degree (**CAS**) in Brain Health (Bern)
Brain Health in **schools** (Basel)

Study on **costs** of brain disorders in Switzerland (with IHME)
Collaboration with **2 NCCRs** (Aging, Sleep)

„**Migraine** Friendly Space“ (with Swiss Headache Society)
PSCH mandate to develop Brain Health module
dBrain Health **Services** to prevent dementia (Geneva)

Patients' **engagement**, alliance of **patients' organizations**

SBHP, awareness/events



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National, Regional and International Plans
for Brain and Mental Health: Bridging the Gaps

June 12–13 2025

09:00-10:30

Session 1: Activities of International Organizations

Moderation: D. Kestel, R. Guzman

09:00-09:10

European Brain Council (EBC)

F. Destrebecq

09:10-09:20

European Academy of Neurology (EAN)

E. Moro

09:20-09:30

European Psychiatric Association (EPA)

G. Dom

09:30-09:40

European Paediatric Neurology Society (EPNS)

K. Rostasy

09:40-09:50

World Federation of Neurology (WFN)

W. Grisold

09:50-10:00

European College of Neuropsychopharmacology (ECPN)

M. Jukić

10:00-10:30

Roundtable

11:00-12:30

Session 2: National and Regional Plans, Part I

Moderation: E. Moro, I. Bègue

11:00-11:10

India

R. Dhamija (virtual)

11:10-11:20

India/Karnataka

S. Alladi

11:20-11:30

Africa/Cameroon

A. Njamnshi

11:30-11:40

Singapore

C. Chen

11:40-11:50

Argentina

F. Manes (virtual)

11:50-11:55

#Brainhealthchallenge2025 M. Kielkopf

11:55-12:30

Roundtable

12:30-13:30

Networking Lunch

13:30-14:00

Session 3: Swiss Perspectives

Moderation: T. Zeltner, L. Remonda

13:30-14:00

PSS

T. Mattig, Director Promotion Santé Suisse

FOPH

P. Baeriswyl, Director Prevention NCD

GSI

F. Nyffenegger, Chairman Bern Public Health Dept.

14:00-15:30

Session 4: National and Regional Plans, Part II

Moderation: G. Frisoni, P. Boon

14:00-14:10

Switzerland

C. Bassetti

14:10-14:20

Italy

M. Leonardi

14:20-14:30

USA/Texas

H. Eyre (virtual)

14:30-14:40

USA/AHA

M. Elkind

14:40-14:50

Canada

J. Z. Young (virtual)

14:50-15:30

Roundtable

15:30-16:00

Coffee Break

16:00-17:20

Session 5: National and Regional Plans, Part III

Moderation: K. Adorjan, U. Fischer

16:00-16:10

Finland

E. Rissanen

16:10-16:20

Norway

S. Angelssen

16:20-16:30

Poland

K. Rejdak

16:30-16:40

Spain

M. Driessen

16:40-16:50

Germany

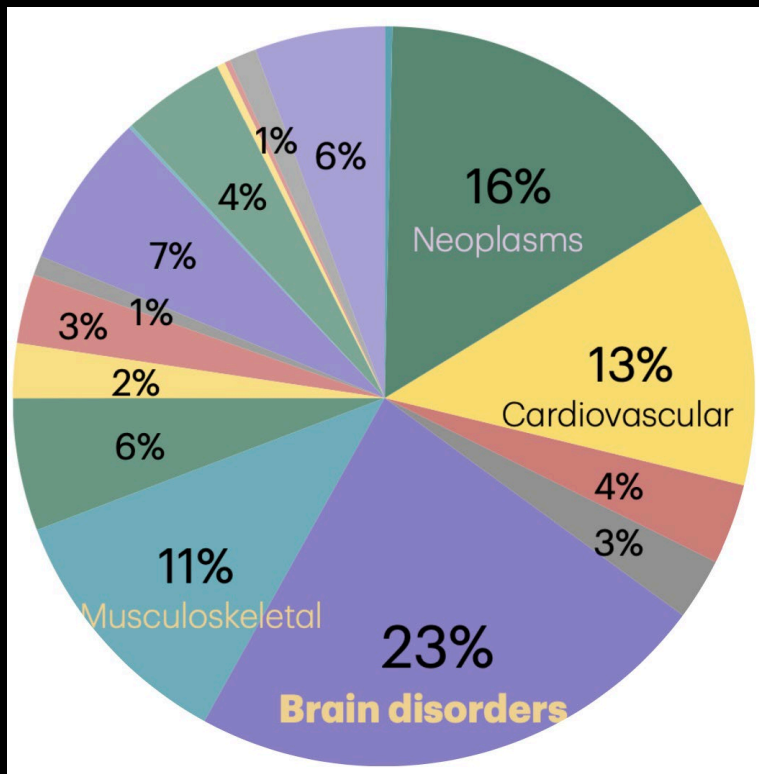
T. Mokrusch

16:50-17:20

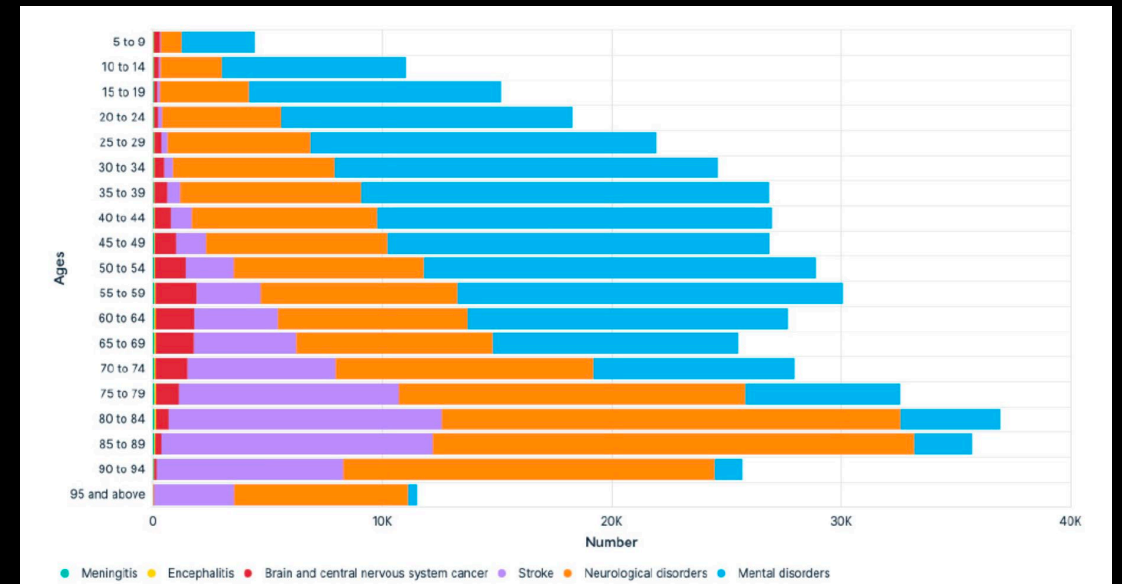
Roundtable

SBHP, research: Burden of brain disorders in Switzerland 2019

Nr 1 cause of **disability** in Switzerland
2021: 23%



Psychiatric/mental disorders

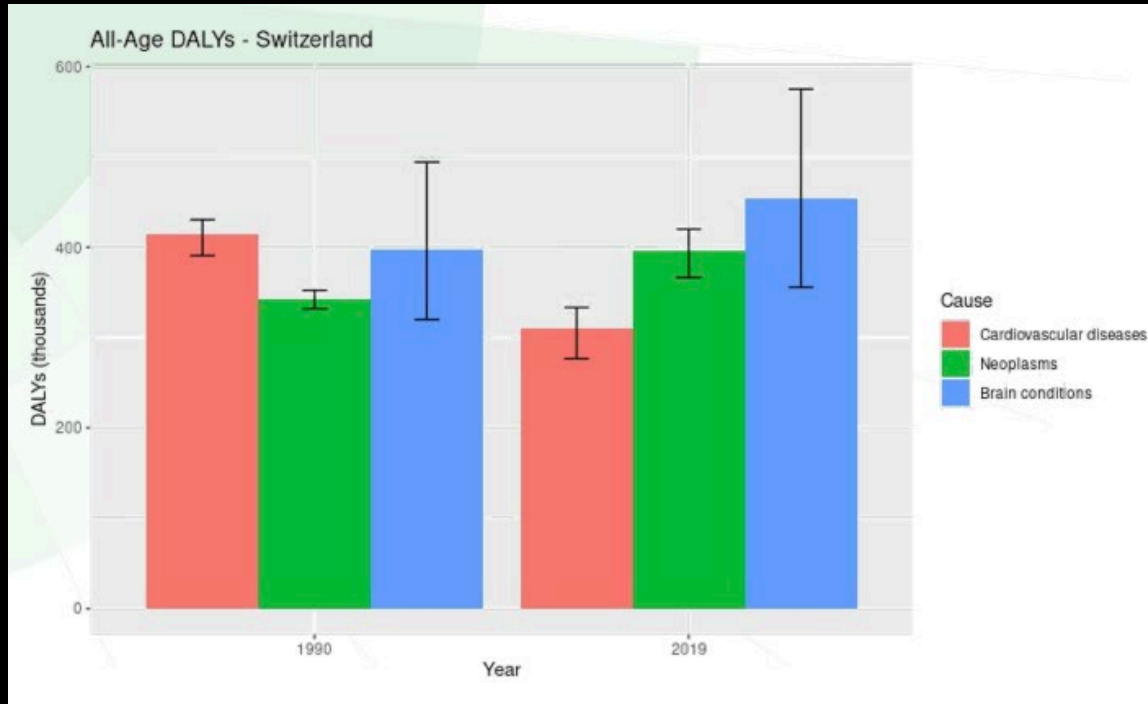


Neurological disorders and stroke

women > men

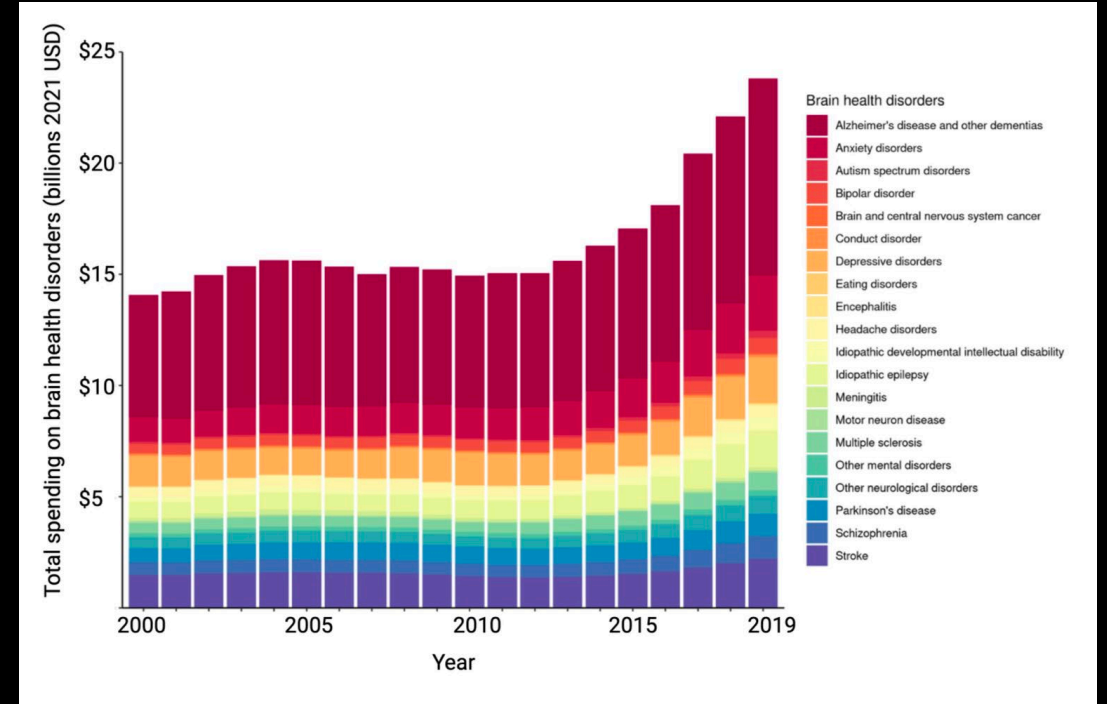
SBHP, research: Burden of brain disorders in Switzerland 1990-2019

DALY's



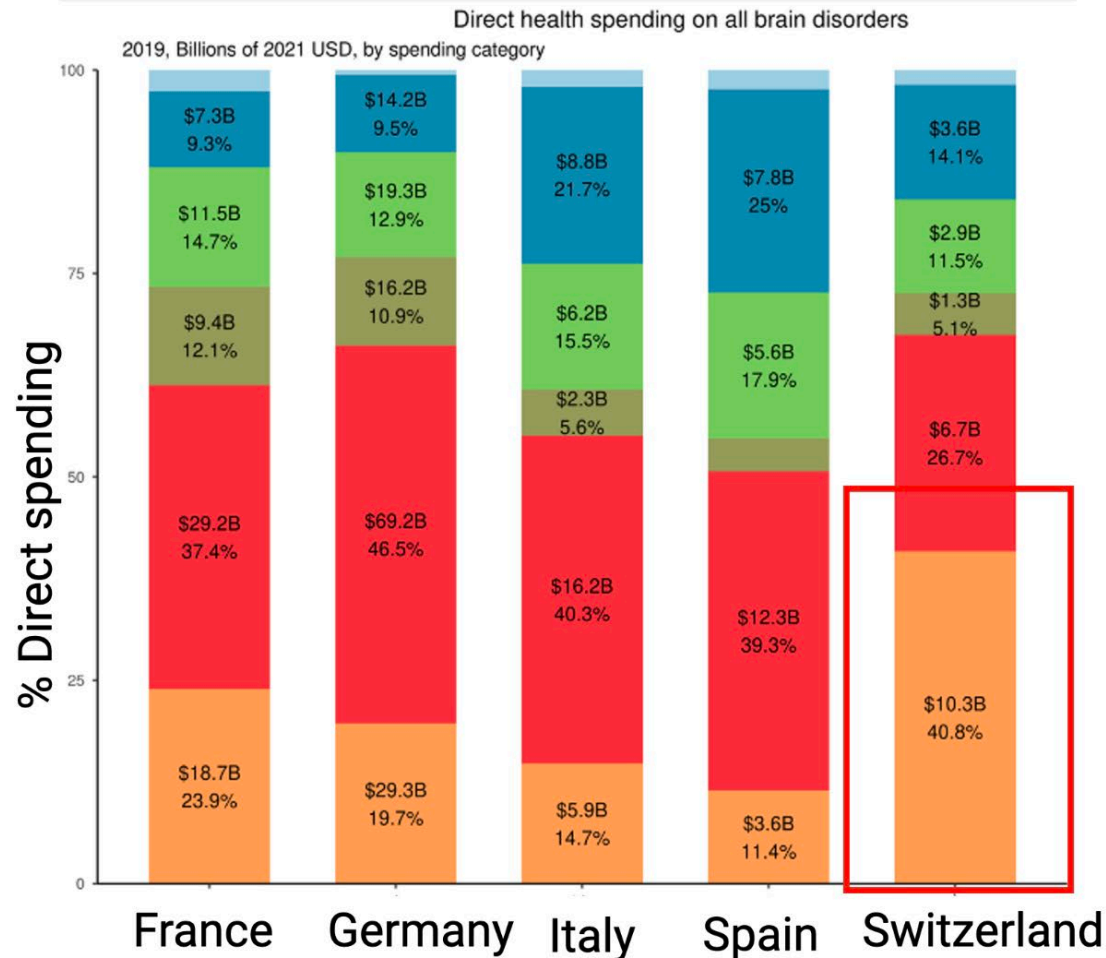
Bassetti, Bègue et al. (in preparation)

Direct costs



Nr 1 cause of direct health costs in Switzerland
2019: 24 billions USD

SBHP, research: Costs of dementia in Switzerland



41% of direct spending
for dementia in Switzerland
goes to nursing homes

Bassetti, Bègue, et al. (in preparation with IHME)

SBHP, ducation: Interprofessional training in Brain Health

u^b

b
UNIVERSITÄT
BERN



2024 - 2025

INTERNATIONAL CERTIFICATE OF ADVANCED STUDIES (CAS) IN BRAIN HEALTH

A postgraduate programme on brain health, its determinants,
promotion at individual and societal level.

In collaboration with:

1.
Brain Health and
its Determinants

3.
Brain Health
Interventions

2.
Brain Diseases
and Disorders

4.
Brain Health
Action Plan

Who can apply

Eligible for the program are applicants with the following backgrounds

- medical degree with or without specialization
- psychologists and neuropsychologists
- sport scientists
- nurses
- physical, occupational and speech therapists
- health care providers


Students geographics

37 students from 16 countries (live)



SBHP, prevention campaigns/activities

National level



SFCNS Swiss Brain Health Plan

«Die Förderung der Hirngesundheit und die Prävention neurologischer und psychischer Erkrankungen sind für die Schweiz von grösster Bedeutung und eine Priorität unserer Nationalen Strategie zur Prävention nichtübertragbarer Krankheiten.»

Elisabeth Baume-Schneider
Bundesrätin
Vorsteherin des Eidgenössischen Departements des Innern



SFCNS Swiss Brain Health Plan

Schweizerische Kopfwehgesellschaft
Société Suisse des Céphalées
Società Svizzera di Cefalea
Swiss Headache Society





Gesundheitsförderung Schweiz
Promotion Santé Suisse
Promozione Salute Svizzera

V5 05 05 2025

« Mieux dans sa tête » - Intégrer la santé cérébrale aux politiques publiques de prévention et promotion de la santé

Cantonal level



First Step: Life and Education at Home:

- Parental role modelling of a healthy lifestyle and promotion of curiosity and interest in learning.
- Creation of a supportive and stimulating environment.
- Open and respectful communication.
- Positive reinforcement and demonstration of healthy coping strategies → fosters resilience.

How to improve and foster brain health at home: Projects by Prof. Dr. Guillermina Noël + students, Lucerne University of Applied Sciences & Arts

Chatterbox

Resilience-Driven Information System: Promoting Brain Health

Second Step: What Is the Role of Schools?
Integrated into existing school curricula:

- Science education
- Health education
- Physical education
- Nutrition education
- Cognitive stimulation
- Reading programmes
- Technological tools
- Sleep hygiene: sleep workshops

Workshops

Based on Cognitive Behavioral Therapy for Insomnia (CBT-i):

- Individualized feedbacks
- Psychoeducation
- Sleep hygiene
- Relaxation
- Sleep window restructuring

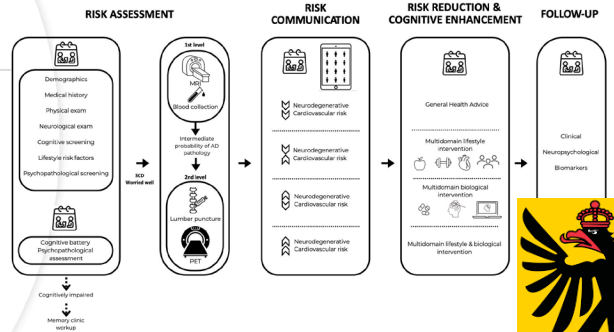
Migraine Friendly School

Sleep ateliers at school: Dr. Virginie Sterpenich and group, GE-BS

Dr. Barbara Studer, BE

Ca. 500k CHF/an x 4 ans, 1000 personnes

LE PROGRAMME DE PRÉVENTION DE LA DÉMENCE ET DE L'ALZHEIMER À GENÈVE



The flowchart illustrates a four-stage process for dementia prevention:

- RISK ASSESSMENT:** Includes demographic, medical history, physical exam, neurological exam, cognitive screening, lifestyle risk factors, and psychopathological screening. It leads to a cognitive battery and psychopathological assessment.
- RISK COMMUNICATION:** Involves blood collection, intermediate probability of AD pathology, and lumbar puncture. It leads to a clinical and neuropsychological assessment.
- RISK REDUCTION & COGNITIVE ENHANCEMENT:** Includes general health advice, multidomain lifestyle intervention, multidomain biological intervention, and multidomain lifestyle & biological intervention. It leads to clinical and neuropsychological biomarkers.
- FOLLOW-UP:** Includes clinical and neuropsychological biomarkers.

At the bottom right, there is a logo featuring a red shield with a black eagle and a yellow cross, and a red shield with a yellow cross.

SBHP, Patients engagement

Luana Deva

Patient's view

"As someone who battled an AVM as a child and who was also faced with the emotional burden of such a diagnosis, I am deeply aware of the impact of brain disorders. We must raise awareness and prioritize holistic public health to support individuals like me. Let's unite to empower patients, caregivers, and organizations for a healthier society."



Belle Lee

Caregiver's view

"As a caregiver first take care of yourself then your loved one. If you are sick you can't take care of anyone. Caregiving is a job learn to let go, get help and set limits."



Daniel Albrecht

Patient's view

Weltmeister und Weltcupsieger Ski alpin

«Wie einschneidend eine Hirnverletzung sein kann, ist vielen Menschen nicht bewusst. Als ehemaliger Profi-Skirennfahrer, der nach einem schweren Schädel-Hirn-Trauma wochenlang im Koma lag, weiß ich aus eigener Erfahrung, wie essenziell ein gesundes Gehirn für ein erfolgreiches, glückliches Leben ist. Die Neurorehabilitation hat mir geholfen, Hirngesundheit und körperliche Fitness wieder zu gewinnen.»



Marcus Schumacher

Patient's view

«Leider ist bei vielen Menschen der Besuch beim Psychiater immer noch mit viel Scham und negativen Gefühlen verbunden! Dabei gibt es keinen Grund psychisch bedingte Schmerzen zu verlängern. Professionelle Unterstützung hilft und man kann sich selbst und seinen Angehörigen damit viel Leid ersparen!»





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Brain and Mental Health Burden of Brain Disorders The Swiss Brain Health Plan **Conclusions/Outlook**



Conclusions

1. **Brain health** is a key-determinant of global health
2. The **burden** of brain disorders is high and increasing
3. **Health plans** should include brain health/prevention of brain disorders

Outlook

1. **Implementation Plan** SBHP (Dr. Gallacchi, Dr. Robert, SBHP Board)
2. **Lancet Commission** on Brain Health/**Lancet Review** on Sleep Health
3. Collaboration with **NCCR's** on sleep and aging
4. Contribution to Swiss Health Plans 2029-