

Prato-Florence School of Integrative Medicine & Biophysics

Integrating The Best Insights From Modern Neuroanatomophysiology, Quantum Chemistry, Pharmacogenomics-Pharmacoelectrodynamics, & The Oriental Subtle Science of Meridians and AYUSH for Informing and Shaping Future Health, Care & Wellbeing

INTRODUCTORY SEMINARS

INSOMNIA, NOCTURIA AND CONSTIPATION

Friday 24 November 2023

18.00 CET

Saletta Conferenze - Officina Teen

Officina Giovani

Piazza Macelli 4

59100 Prato

In Presence and Online

Celery: Healthy and Healing

Sedano: sano e curativo

The History of Celery, use in the treatment of Insomnia and Stress.
Evidence, Mechanism and The Future

Celery

Apium graveolens L.

$2n = 2x = 22,$

1C=3.18 Gb (approx. human genome)

> 34,277 predicted genes

a member of the *Apiaceae* family,
one among the most important and globally
grown vegetables



Celery: Healthy and Healing

Sedano: sano e curativo

The History of Celery, use in the treatment of Insomnia and Stress. Evidence, Mechanism and The Future

Native to the Mediterranean areas and the Middle East, celery was used as a flavouring by the ancient Greeks and Romans and as a medicine by the ancient Chinese. The ancient forms resembled smallage, or wild celery. Celery with large, fleshy, succulent, upright leafstalks, or petioles, was developed in the late 18th century. The stringiness that characterizes most celery has been eliminated from some varieties.



<https://www.britannica.com/plant/celery>

Max Ludwig Henning Delbrück, [FRS](#)

(September 4, 1906 – March 9, 1981)



MAX DELBRÜCK - California Institute of Technology, Pasadena, California

<http://www.jeanne-mammen.de/html/english/contents/delbrueck.html>

A Physicist Looks at Biology

Address Delivered at the Thousandth Meeting of the Academy*

•Reprinted from the Transactions of The Connecticut Academy of Arts and Sciences, vol. 38, Dec. 1949, pp. 173-190

•<http://www.yale.edu/caas/transactions.html>

https://www1.biologie.uni-hamburg.de/b-online/snowbird/prefaces/essay_delbrueck.htm

... a living cell is a system in **flux equilibrium**, **matter** and **energy** are taken in from the environment, are metabolized and partly assimilated, partly degenerated, and waste products are given back to the environment.

a living cell is a system in flux equilibrium, matter and energy are taken in from the environment, are metabolized and partly assimilated, partly degenerated, and waste products are given back to the environment.

The closer one looks at these performances of matter in living organisms the more impressive the show becomes. **The meanest living cell becomes a magic puzzle box** full of elaborate and changing molecules, and far outstrips all chemical laboratories of man in the skill of organic synthesis performed with ease, expedition, and good judgment of balance. The complex accomplishment of any one living cell is part and parcel of the first-mentioned feature, that **any one cell represents more an historical than a physical event**. These complex things do not rise every day by spontaneous generation from the nonliving matter - if they did, they would really be reproducible and timeless phenomena, comparable to the crystalization of a solution, and would belong to the subject matter of physics proper. **No, any living cell carries with it the experiences of a billion years of experimentation by its ancestors. You cannot expect to explain so wise an old bird in a few simple words.**

Listening to the story of modern biochemistry he might become persuaded that the cell is a sack full of enzymes acting on substrates converting them through various intermediate stages either into cell substance or into waste products. The enzymes must be situated in their proper strategic positions to perform their duties in a well regulated fashion. They in turn must be synthesized and must be brought into position by manoeuvres which are not yet understood, but which, at first sight at least, do not necessarily seem to differ in nature from the rest of biochemistry. Indeed, **the vista of the biochemist is one with an infinite horizon.**

Max Ludwig Henning Delbrück, [FRS\[1\]](#)
(September 4, 1906 – March 9, 1981)



<http://www.jeanne-mammen.de/html/english/contents/delbrueck.html>

Denis Noble – 10 rules of complex systems

Principles of Systems Biology

Denis Noble at a meeting on Systems Biology at Chicheley Hall, Newport Pagnell, August 2011

Noble has proposed Ten Principles of Systems Biology:

Biological functionality is multi-level

Transmission of information is not one way

DNA is not the sole transmitter of inheritance

The theory of biological relativity: there is no privileged level of causality

Gene ontology will fail without higher-level insight

There is no genetic program

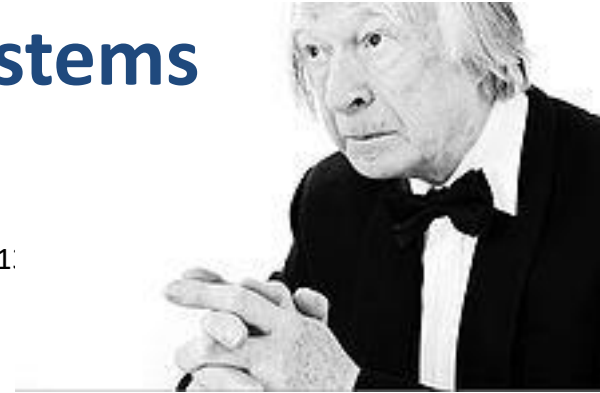
There are no programs at any other level

There are no programs in the brain

The self is not an object

**There are many more to be discovered;
a genuine 'theory of biology' does not yet exist**

https://en.wikipedia.org/wiki/Denis_Noble



Denis Noble

CBE FRS FMedSci MAE
(b 1936)

Burdon Sanderson Chair of
Cardiovascular Physiology
University of Oxford

(1984 to 2004)

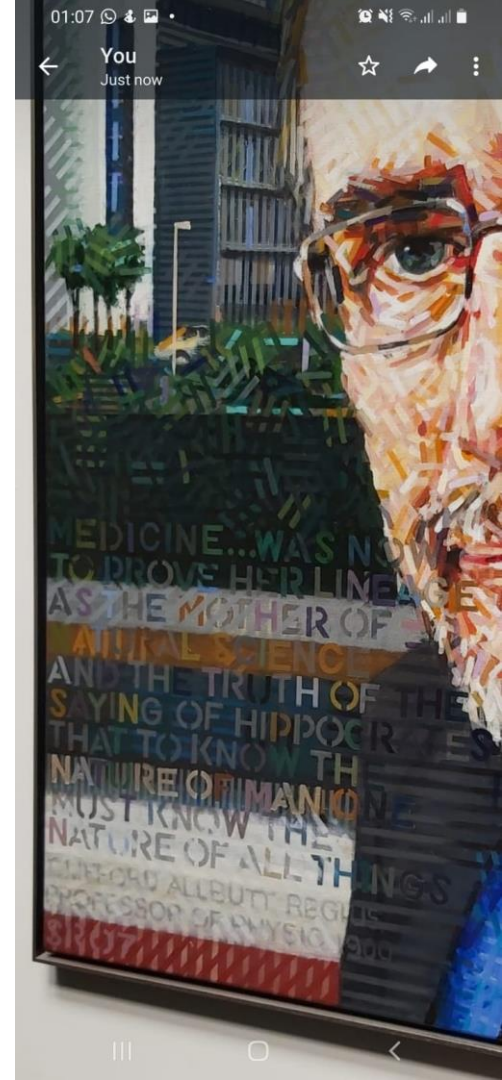


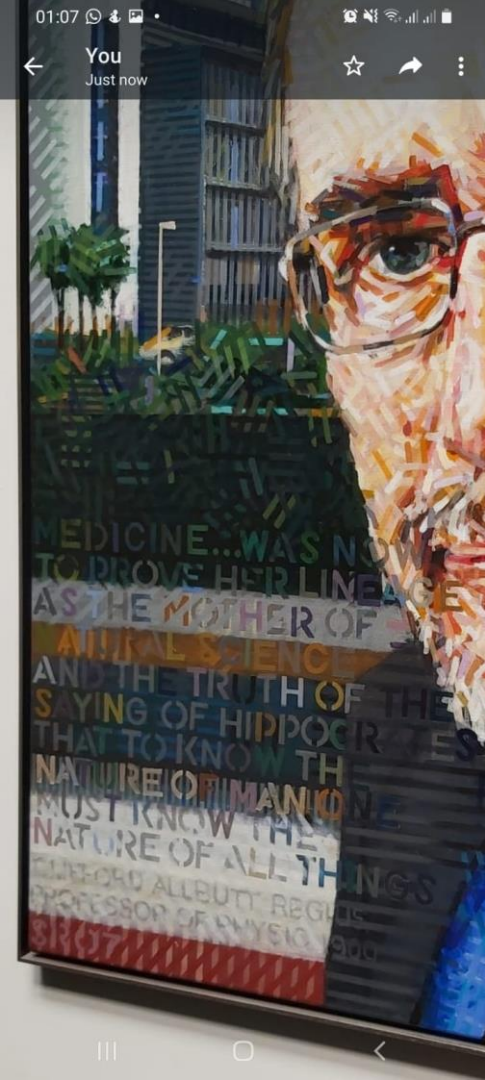
UNIVERSITY OF CAMBRIDGE

School of Clinical Medicine



<https://www.medschl.cam.ac.uk/>





... a section of the portrait of Sir Keith Peters, 25th Regius Professor of Physic, 1987 to 2005. The portrait is displayed at the entrance to the Medical School Library on the stairwell of the Clinical School.

The text there is from an oration by Professor Clifford Allbutt, 18th Regius Professor of Physic (1892 to 1925)

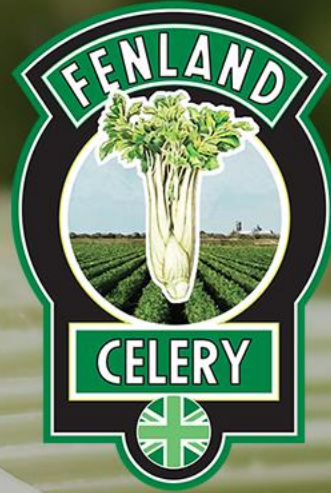
"Medicine ... was now to prove her lineage as the mother of natural science and the truth of the saying of Hippocrates,

to know the nature of man one must know the nature of all things"

Knowing man by knowing the nature of all things ...
This is what *Ayurveda* / *AYUSH* is all about.



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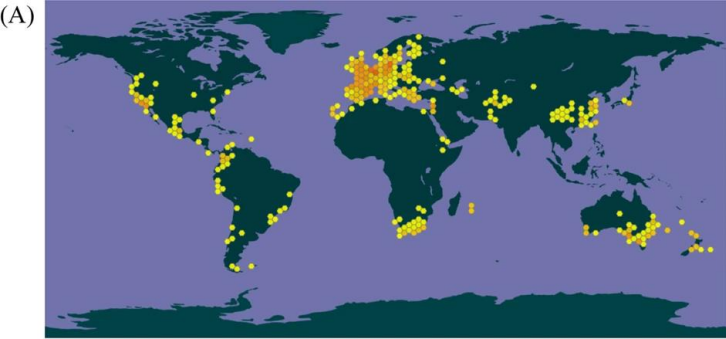
G's Fresh
Barway, Ely,
Cambridgeshire
CB7 5TZ

[Discover Fenland Celery](#)

<http://www.fenlandcelery.com/>

Celery: Healthy and Healing

Sedano: sano e curativo



- Georeferenced records of celery on the world map.
- Image of celery. The data set was obtained from the GBIF website (www.gbif.org). The colored hexagons represent the locations of georeferenced celery records.

<https://www.nature.com/articles/s41438-019-0235-2/figures/1>

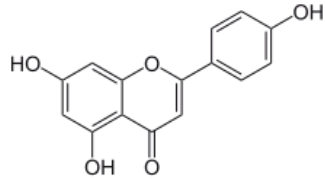


The genome sequence of celery (*Apium graveolens* L.), an important leaf vegetable crop rich in apigenin in the Apiaceae family

<https://www.nature.com/articles/s41438-019-0235-2>

Apigenin (4', 5, 7-trihydroxyflavone) is a **flavone under the category of natural flavonoid that is abundantly present in common fruits, vegetables, nuts, onions, oranges, and tea.** Apigenin has various beneficial health effects such as antioxidant, anti-inflammatory, and chemoprevention.

Apigenin



Chemical formula: $C_{15}H_{10}O_5$



Celery: Healthy and Healing

Sedano: sano e curativo

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Examine > Supplements > Apigenin Evidence-based

Apigenin

Apigenin is a bioflavonoid that appears to reduce anxiety, affect immune health, and modulate hormones. It is found in chamomile tea and a variety of vegetables and herbs. Apigenin is stable when consumed as part of the diet, but unstable when isolated from its source.

[Dosage](#)

[Refer and Earn](#)

Apigenin is most often used for **Mental Health**.



Researched by:

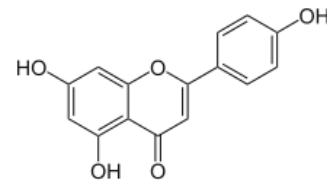
Daryl Nault, BA, MS

Fact-checked by:

Nick Milazzo, MSc, MPH

Last Updated: June 15, 2023

Apigenin



Chemical formula: $C_{15}H_{10}O_5$



<https://examine.com/supplements/apigenin/>

Celery: Healthy and Healing

Sedano: sano e curativo

Examine.com navigation: Search, Research Feed, Guides, Health Topics, Supplements, Examine On Sale, Login, About.

Examine > Supplements > Apigenin (evidence-based)

Apigenin

Apigenin is a bioflavonoid that appears to reduce anxiety, affect immune health, and modulate the expression of a variety of genes in a variety of vegetables and herbs. Apigenin is stable when consumed as part of the diet, but unstable when isolated from its source.

Researched by: Daryl Heath, BA, MS
First discovered by: Nick Mizzaro, MSc, MPH
Last updated: June 16, 2023

Apigenin is most often used for Mental Health.

Buttons: Dosage, Refer and Earn

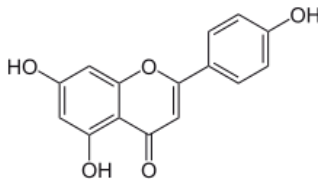
Examine.com navigation: Search, Research Feed, Guides, Health Topics, Supplements.

How does apigenin work?

Animal studies suggest that apigenin may impede genetic mutations occurring in cells that are exposed to toxins and bacteria.^{[36][37]} Apigenin may also play direct roles in the removal of free radicals, inhibition of tumor growth enzymes, and induction of detoxification enzymes such as glutathione.^{[38][39][40][41]} Apigenin's anti-inflammatory ability may also explain its effects on mental health, brain function, and immunological response,^{[42][43][44]} though some large observational studies don't support this conclusion with respect to metabolic conditions.^[44]

- Does apigenin affect immune health and function?
- Does apigenin affect neurologic health?
- Does apigenin affect hormone health?
- What else has apigenin been studied for?

Apigenin



Chemical formula: C₁₅H₁₀O₅



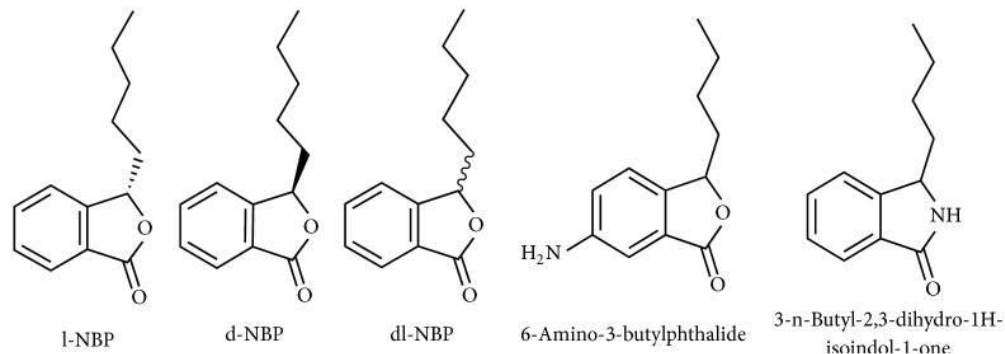
<https://examine.com/supplements/apigenin/>



3-N-Butylphthalide (NBP)

An anti-ischemic drug approved for clinical usage in China by the National Medical Products Administration of China in 2002

Structures of NBP and its derivatives.



Celery (*Apium graveolens*)

CeleryDB: a genomic database for celery. [\[PMID: 29992323\]](https://pubmed.ncbi.nlm.nih.gov/29992323/)

<https://ngdc.cncb.ac.cn/databasecommons/database/id/6778>

State Key Laboratory of Crop Genetics and Germplasm Enhancement, Key Laboratory of Biology and Germplasm Enhancement of Horticultural Crops in East China, Ministry of Agriculture, College of Horticulture, Nanjing Agricultural University, Nanjing 210095, China.

https://www.medicinenet.com/what_are_the_benefits_of_eating_celery/article.htm

RESULTS BY YEAR

487 results

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TEXT AVAILABILITY

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ARTICLE ATTRIBUTE

Co-administration of dl-3-n-butylphthalide and neprilysin is neuroprotective in Alzheimer disease associated with mild traumatic brain injury.

Cite Wang ZG, Sharma A, Feng L, Muresanu DF, Tian ZR, Lafuente JV, Buzoianu AD, Nozari A, Huang H, Chen L, Manzhulo I, Wiklund L, Sharma HS.

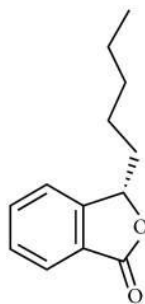
Share Int Rev Neurobiol. 2023;172:145-185. doi: 10.1016/bs.irn.2023.06.006. Epub 2023 Sep 26. PMID: 37833011

Thus, there are reasons to believe that dl-3-n-butylphthalide could effectively prevent Alzheimer's disease brain pathology. ...Nanodelivery of dl-3-n-butylphthalide appears to be more potent as compared to the conventional delivery of th ...

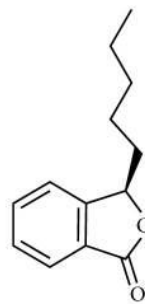
3-N-Butylphthalide (NBP)

An anti-ischemic drug approved for clinical usage in China by the National Medical Products Administration of China in 2002

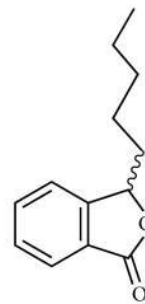
Structures of NBP and its derivatives.



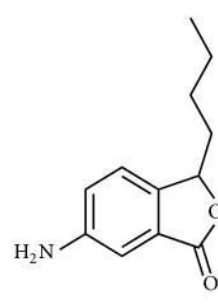
l-NBP



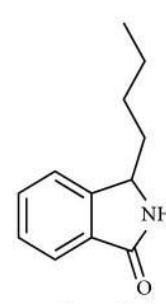
d-NBP



dl-NBP



6-Amino-3-butylphthalide



3-n-Butyl-2,3-dihydro-1H-indolizone

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Table View

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<input type="checkbox"/>	Study Title	NCT Number	Status	Conditions	Interventions	Sponsor
<input type="checkbox"/> 1	DI-3-n-butylphthalide and Cerebrolysin Treatment in Acute Ischemic Stroke	NCT02149875	Completed WITH RESULTS	<ul style="list-style-type: none"> Acute Cerebral Stroke Within 12 Hours of the First Time 	<ul style="list-style-type: none"> Drug: DI-3-n-butylphthalide Drug: Cerebrolysin Drug: Placebo 	Shanghai 6th People's Hospital
<input type="checkbox"/> 2	For Patients With Ischemic Stroke, Clinically Study the Effectiveness and Safety of Butylphthalide.	NCT05068349	Recruiting	<ul style="list-style-type: none"> Stroke Cerebral Infarction Brain Infarction 4 more 	<ul style="list-style-type: none"> Drug: Butylphthalide 	Qianfoshan Hospital

None Selected



RSS





Manage

> Show

<input type="checkbox"/>	Study Title	NCT Number	Status	Conditions	Interventions	Sponsor
<input type="checkbox"/> 1	DL-3-n-butylphthalide and Cerebrolysin Treatment in Acute Ischemic Stroke	NCT02149875	Completed WITH RESULTS	<ul style="list-style-type: none"> Acute Cerebral Stroke Within 12 Hours of the First Time 	<ul style="list-style-type: none"> Drug: DL-3-n-butylphthalide Drug: Cerebrolysin Drug: Placebo 	Shanghai 6th People's Hospital
<input type="checkbox"/> 2	For Patients With Ischemic Stroke, Clinically Study the Effectiveness and Safety of Butylphthalide.	NCT05068349	Recruiting	<ul style="list-style-type: none"> Stroke Cerebral Infarction Brain Infarction 4 more 	<ul style="list-style-type: none"> Drug: Butylphthalide 	Qianfoshan Hospital
<input type="checkbox"/> 3	DL-3-n-butylphthalide Treatment in Patients With Mild to Moderate Alzheimer's Disease Already Receiving Donepezil	NCT02711683	Completed	<ul style="list-style-type: none"> Alzheimer's Disease 	<ul style="list-style-type: none"> Drug: DL-3-n-butylphthalide Drug: Donepezil 	First Affiliated Hospital Xi'an Jiaotong University
<input type="checkbox"/> 4	Effect of Butylphthalide on Cognitive Level Change After Cerebral Vascular Event—a Randomized Control Trial (Be-CLEVER) NEW	NCT05976152	Not yet recruiting	<ul style="list-style-type: none"> Stroke Post-stroke Cognitive Impairment (PSCI) 	<ul style="list-style-type: none"> Drug: dl-3-butylphthalide Drug: dl-3-butylphthalide placebo 	Fudan University
<input type="checkbox"/> 5	Efficacy and Safety of Butylphthalide for Acute Ischemic Stroke Patients Receiving Intravenous Thrombolysis or Endovascular Treatment	NCT03539445	Completed	<ul style="list-style-type: none"> Acute Ischemic Stroke 	<ul style="list-style-type: none"> Drug: Butylphthalide Drug: Butylphthalide Placebo 	Beijing Tiantan Hospital
<input type="checkbox"/> 6	The Efficacy of DL-NBP in Patients With Mild Subcortical Ischemic Vascular Dementia	NCT03906123	Unknown status	<ul style="list-style-type: none"> Subcortical Vascular Dementia Cerebral Small Vessel Diseases 	<ul style="list-style-type: none"> Drug: NBP Drug: Placebos 	Tianjin Medical University General Hospital

Chemical composition and anti-inflammatory activity of pectic polysaccharide isolated from celery stalks



Raisa G. Ovodova^a, Victoria V. Golovchenko^a, Sergey V. Popov^a  , Galina Yu. Popova^a,
Nikita M. Paderin^a, Alexandre S. Shashkov^b, Yury S. Ovodov^a

^a Institute of Physiology, Komi Science Centre, The Urals Branch of the Russian Academy of Sciences, 50, Pervomaiskaya Str., Syktyvkar 167982, Russia

^b N.D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, 47, Leninsky prospect, Moscow 119991, Russia

Received 16 June 2008, Revised 25 August 2008, Accepted 30 September 2008, Available online 7 October 2008.

Chemical composition and anti-inflammatory activity of pectic polysaccharide isolated from celery stalks

Raisa G. Ovodova^a, Victoria V. Golovchenko^a, Sergey V. Popov^a  , Galina Yu. Popova^a, Nikita M. Paderin^a, Alexandre S. Shashkov^b, Yury S. Ovodov^a

^a Institute of Physiology, Komi Science Centre, The Urals Branch of the Russian Academy of Sciences, 50, Pervomaiskaya Str., Syktyvkar 167982, Russia

^b N.D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, 47, Leninsky prospect, Moscow 119991, Russia

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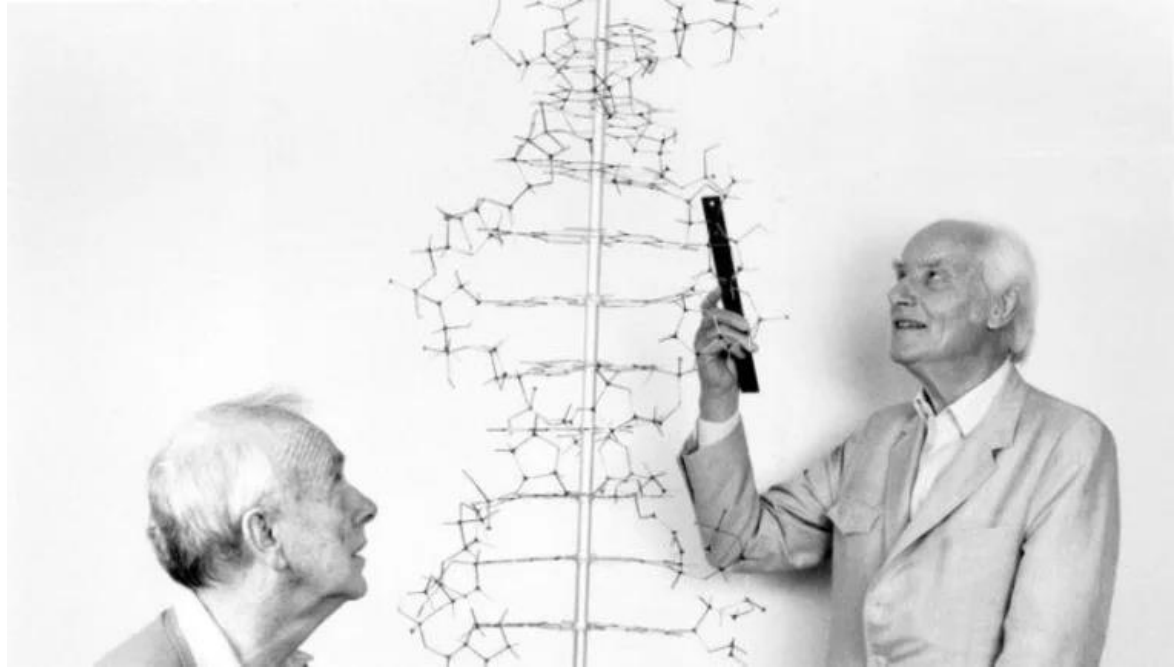
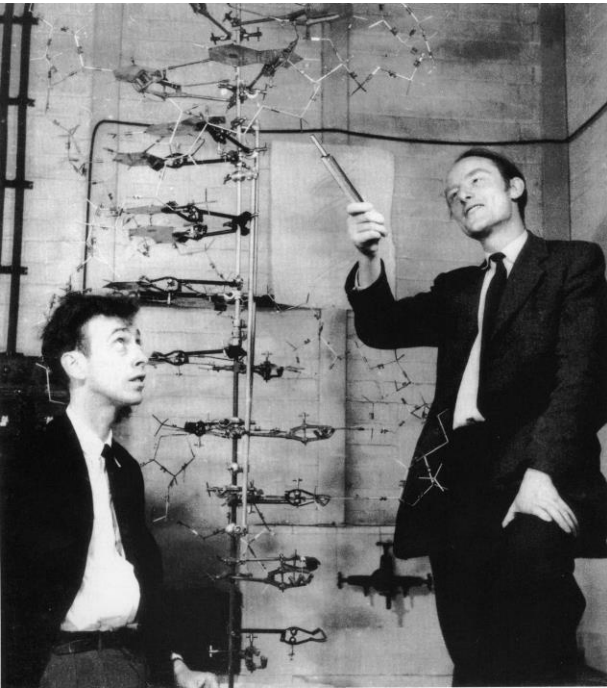
Abstract

A pectic polysaccharide called *apiuman* was isolated from fresh celery stalks by extraction with an aqueous ammonium oxalate followed by ultrafiltration, and was shown to consist of D-galacturonic acid (GalA, 81.0%), L-rhamnose (Rha, 2.6%), L-arabinose (Ara, 2.5%), and D-galactose (Gal, 3.6%) residues. Apiuman was found to be digestible with α -1,4-D-galacturonase to yield D-GalA, thus confirming that apiuman represents a pectic polysaccharide. The purified apiuman (AG) obtained was subjected to ion exchange chromatography on DEAE-cellulose to produce two polysaccharide fractions, AG-1 and AG-2, which had similar sugar compositions. Partial acid hydrolysis of apiuman, AG, revealed galacturonan to be at the core of the macromolecule. Nuclear magnetic resonance (NMR) spectra indicated that the backbone of apiuman appeared to represent α -1,4-D-galacturonan, with considerable amounts of L-Rha residues involved by α -1,2-linkages in the linear chain of the macromolecule core. The side chains were found to consist of Ara and Gal attached at the 4-position of the Rha residues.

Furthermore, apiuman, AG, was found to improve the survival of mice subjected to a lethal dose of lipopolysaccharide (LPS), and the anti-endotoxemic effect of apiuman, AG, was shown to be mediated by decreased interleukin-1 β (IL-1 β) and increased interleukin-10 (IL-10) production. Apiuman was also shown to diminish the amount of neutrophils migrating to the peritoneal cavity after LPS injection.

DNA70

1953 to 2023



Genomes
Genomics
Epigenomics
Individual genomics
Metagenomics

'Lost' letters reveal twists in discovery of double helix

Rediscovered letters and postcards highlight the fierce competition among scientists who discovered DNA's famous double-helix structure and unraveled the genetic code.

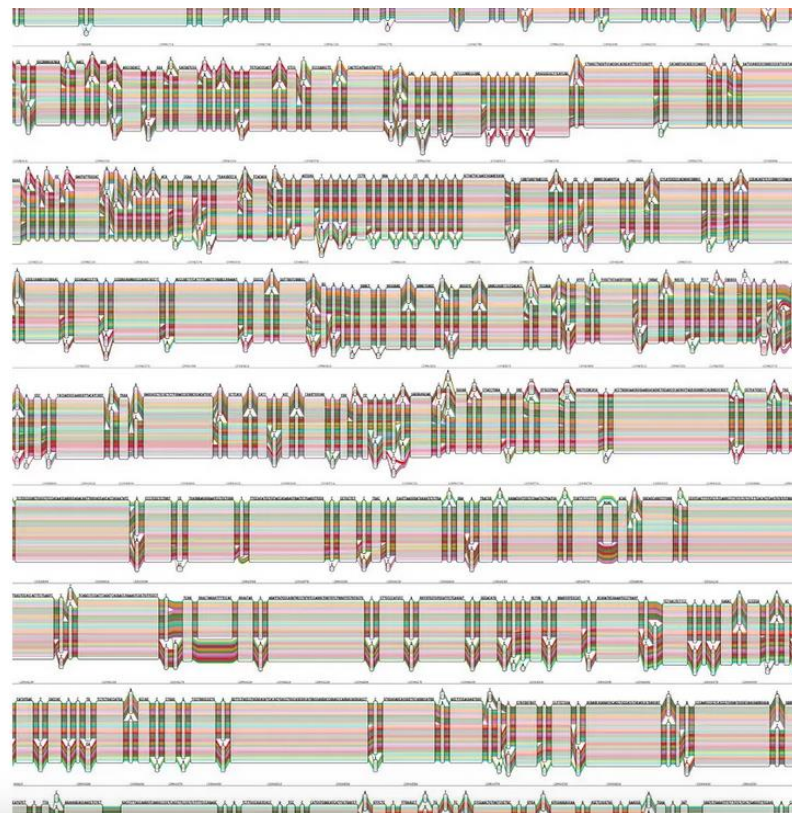
<https://www.nbcnews.com/id/wbna39423795>

20 years after scientists first released a draft sequence of the human genome Scientists Unveil a More Diverse Human Genome

The New York Times

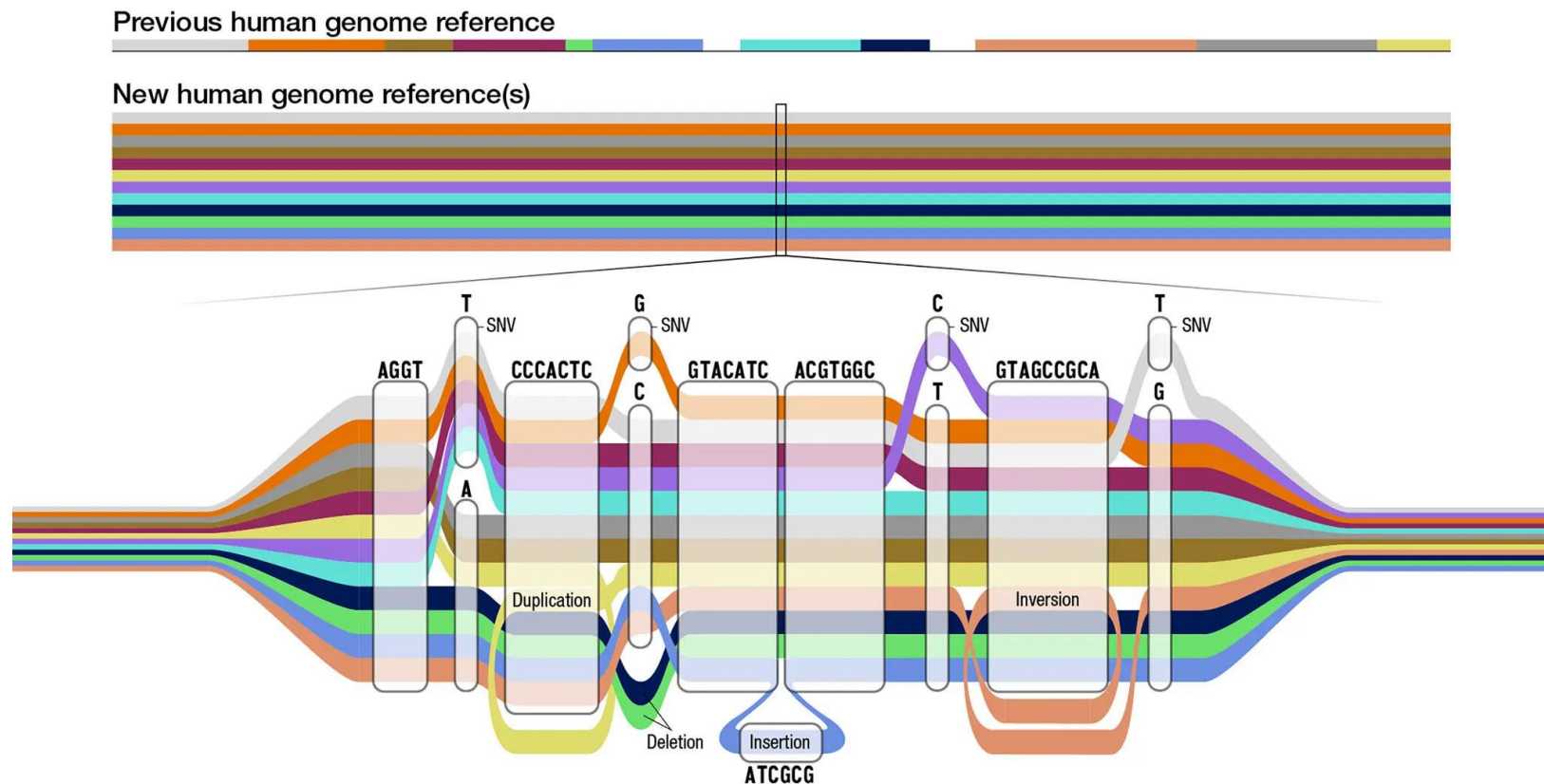
Scientists Unveil a More Diverse Human Genome

The “pangenome,” which collated genetic sequences from 47 people of diverse ethnic backgrounds, could greatly expand the reach of personalized medicine.



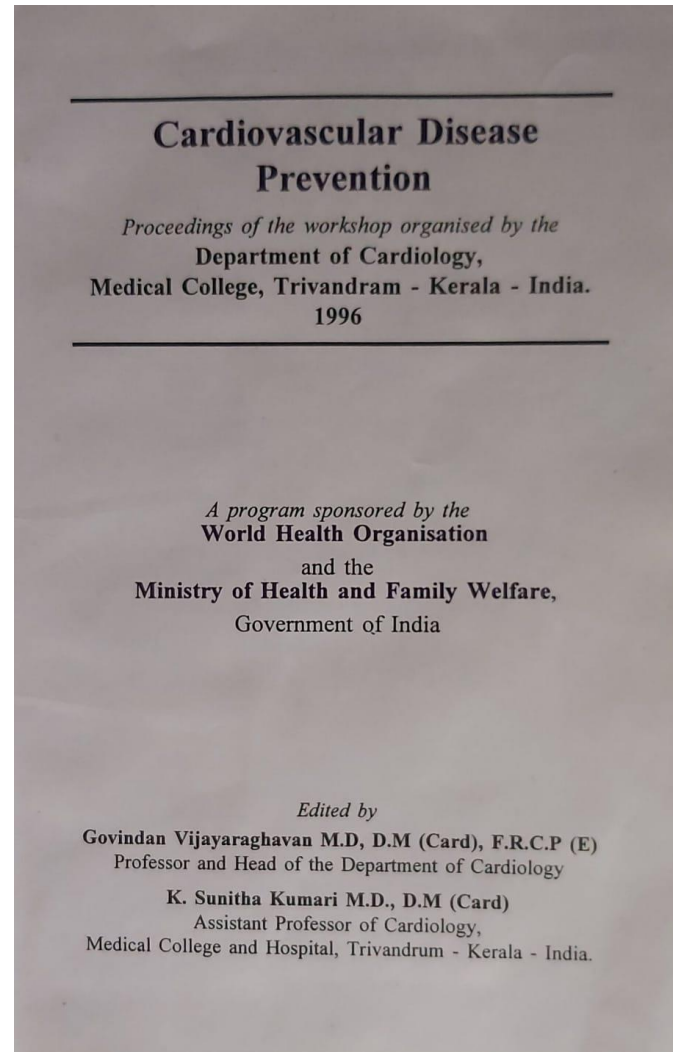
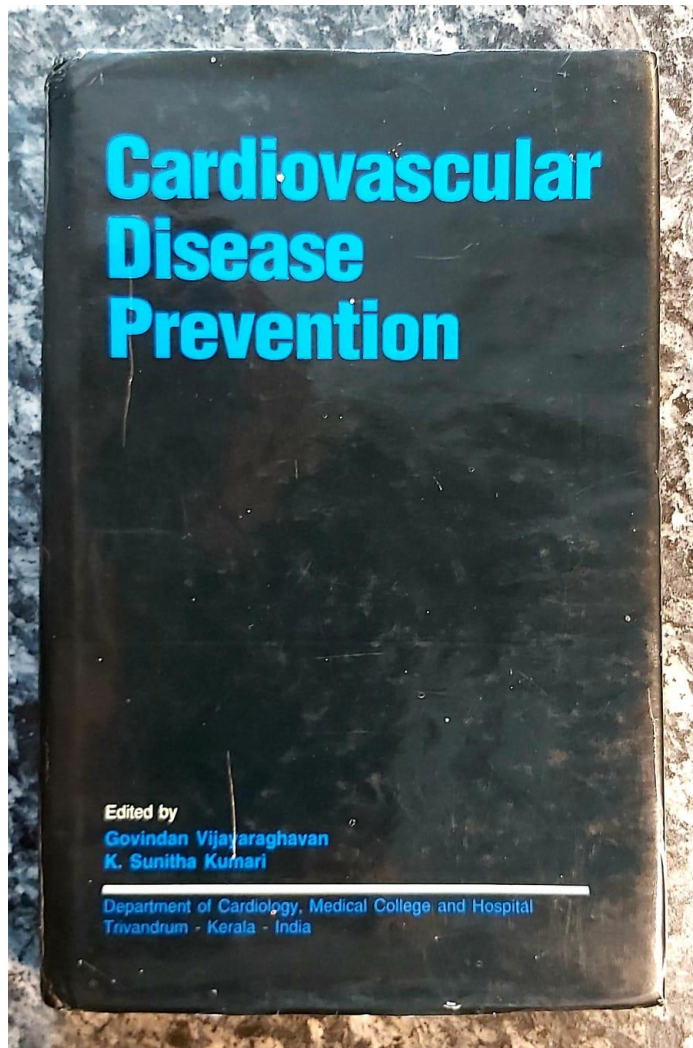
<https://www.nytimes.com/2023/05/10/science/pangenome-human-dna-genetics.html>

20 years after scientists first released a draft sequence of the human genome Scientists Unveil a More Diverse Human Genome



P5 Medicine:

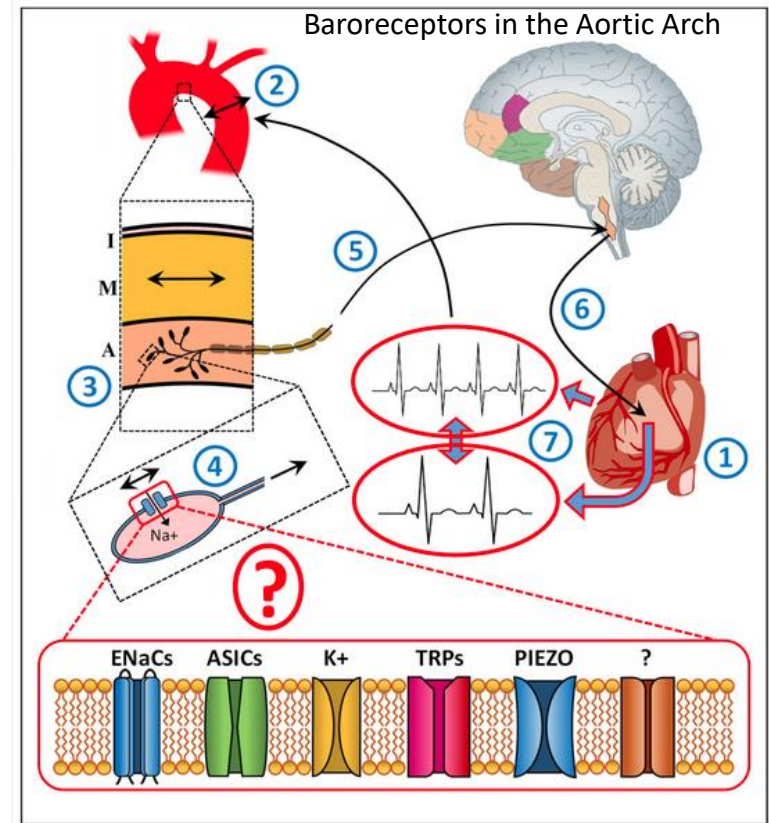
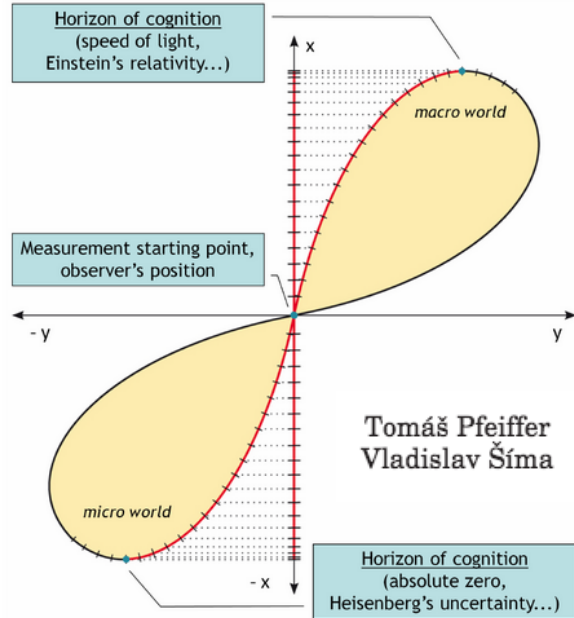
Personalized,
Predictive,
Preventive,
Participatory,
Precision
Medicine



Yoga & AYUSH: Extending the Horizon of Cognition

THE HORIZON OF COGNITION

A way to unify the micro/macro world from the point of view of the Philosophy of Existence



Cells of the adult human heart

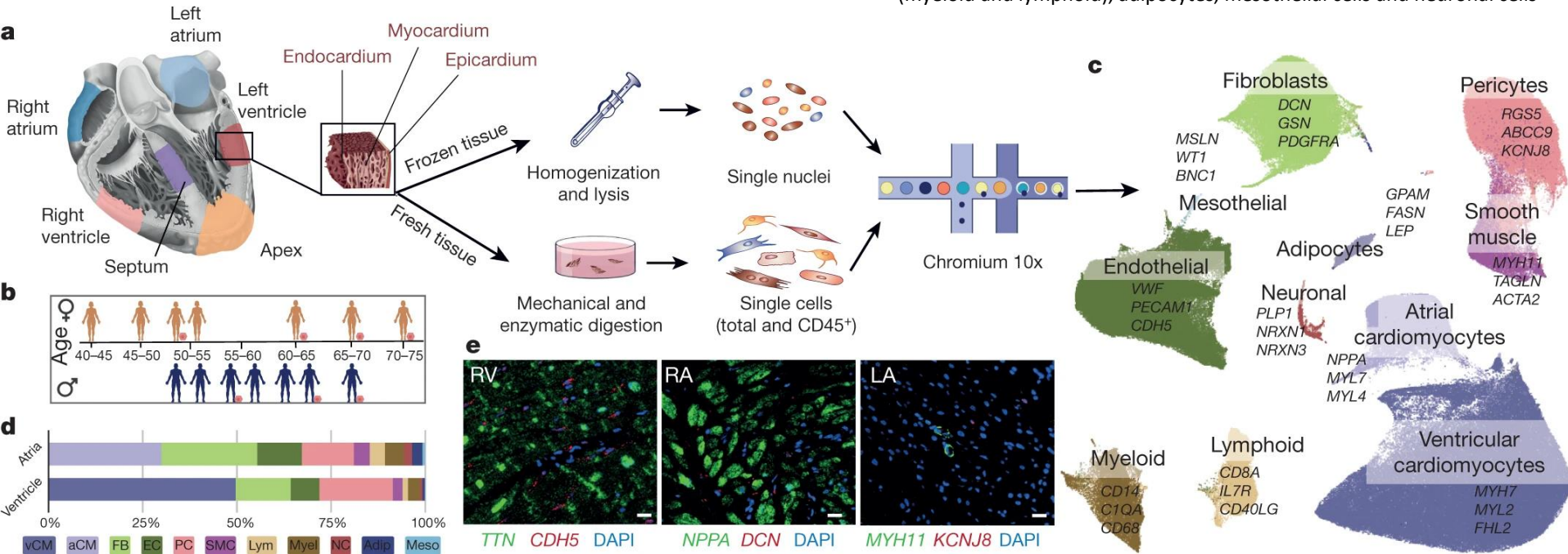
Human cardiac cell atlas: improving our understanding of the human heart and a valuable reference for future studies.

Cellular landscape of the adult human heart

11 major cell types:

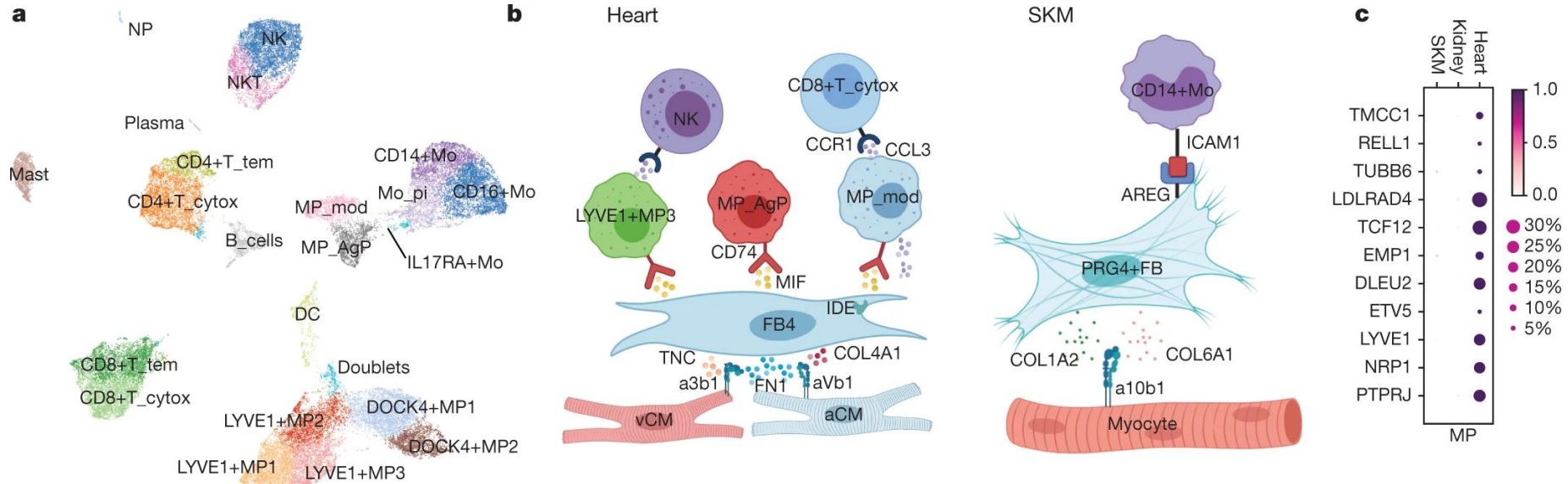
atrial cardiomyocytes, ventricular cardiomyocytes, fibroblasts (FBs), endothelial cells (ECs), pericytes, smooth muscle cells (SMCs), immune cells (myeloid and lymphoid), adipocytes, mesothelial cells and neuronal cells

Fig. 1: Cell composition of the adult human heart.



Cells of the adult human heart

Fig. 4: Cardiac immune populations and cell–cell interactions.



a, Manifold of 40,868 myeloid and lymphoid cardiac cells. NP, neutrophils; NK, natural killer; NKT, natural killer T cells; CD4+T_tem, effector-memory CD4+ T cells; CD4+T_cytox, CD4+ cytotoxic T cells; CD8+T_tem, CD8+ effector-memory T cells; CD8+T_cytox, CD8+ cytotoxic T cells; DC, dendritic cells; CD14+Mo, CD14+ monocytes; CD16+Mo, CD16+ monocytes; Mo_pi, pro-inflammatory monocytes; IL17RA+Mo, IL17RA+ monocytes; MP_AgP, HLA class II antigen-presenting macrophages; MP_mod, monocyte-derived macrophages; LYVE1+MP1–3, M2-like, LYVE1+ macrophages sets 1–3; DOCK4+MΦ1–2, DOCK4+ macrophage sets 1–2; B_cells, B cells; plasma, plasma B cells; Mast, mast cells. b, BioRender infographic summarizes predicted cell–cell interaction circuits between atrial and ventricular cardiomyocytes, FB4 and immune cells involved in tissue repair in the heart and SKM. Data are available in Supplementary Table 17. c, Gene expression signature for cardiac-specific LYVE1+ macrophages compared against predicted matched populations in skeletal muscle and kidney.

The Lymphatic Vessel Endothelial Hyaluronan Receptor (Lyve1) is notably expressed on lymphatic endothelial cells (LEC) and selected macrophages, but not on microglia.

Research Article

Cell Biology

Single-cell RNA-seq of heart reveals intercellular communication drivers of myocardial fibrosis in diabetic cardiomyopathy

Wei Li, Xinqi Lou, Yingjie Zha, Yinyin Qin, Jun Zha, Lei Hong, Zhanli Xie, Shudi Yang, Chen Wang ... Shigang Qiao  [see all](#) »

Cyrus Tang Hematology Center, Soochow University, China; Institute of Clinical Medicine Research, Suzhou Science & Technology Town Hospital, Gusu School, Nanjing Medical University, China; Faculty of Anesthesiology, Suzhou Science & Technology Town Hospital, Gusu School, Nanjing Medical University, China; Suzhou Polytechnic Institute of Agriculture, China

Apr 3, 2023 · <https://doi.org/10.7554/eLife.80479>  

<https://elifesciences.org/articles/80479>

GLOBAL HEALTH & CARE:

AYUSH SYSTEMS & AYUSH DIPLOMACY FOR BUILDING GLOBAL HEALTH

Health > Health & Care > versus “**Diseasecare**” masquerading as Healthcare

Current problems in international health & care

Important Global Health topics:

Access to care and right to health

Infectious diseases

Non-communicable diseases

Reproductive health

Mental health

Cultural dimensions of medicine

Health a prisoner / hostage of Healthcare

AYUSH solutions to global health care problems

WHO GCTM: A litany of gaps in global health & care

Identifying gaps and strategies for closing the gaps

Reformulating narratives about health as an emergence from everything without

We cannot continue with this strange idea of *fighting disease*

Without:

- 1) promoting health,
 - 2) maintaining health,
 - 3) preventing disease
- and
- 4) enabling novel cures

It is time to innovate the health & care narrative, globally

The First WHO Traditional Medicine Global Summit took place on 17 and 18 August 2023 in Gandhinagar, Gujarat, India

<https://www.who.int/news-room/events/detail/2023/08/17/default-calendar/the-first-who-traditional-medicine-global-summit>



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Hon'ble Cabinet Minister
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Ministry of Ports, Shipping and
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30 Institutes

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Institutes

S.No	Name of the Institute
1	Central Ayurveda Research Institute, New Delhi
2	National Ayurveda Research Institute for Panchakarma, Cheruthuruthy
3	Central Ayurveda Research Institute, Bhubaneswar
4	Central Ayurveda Research Institute, Kolkata
5	Central Ayurveda Research Institute, Patiala
6	Raja Ramdeo Anandilal Podar (RRAP) Central Ayurveda Research Institute, Mumbai
7	National Institute of Indian Medical Heritage, Hyderabad
8	Regional Ayurveda Research Institute, Lucknow
9	M.S. Regional Ayurveda Research Institute, Jaipur
10	Regional Ayurveda Research Institute, Gwalior

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- Transfer Order Under Transfer Rotational Policy
- Application Invited for Post Doctoral Fellowship Scheme 2023-June batch
- CCRAS-AGNI

About Database

This database incorporates **7263 botanical names**, more than **1,50,000 vernacular names** in ten different Indian languages & more than **5000 authentic images** of Indian medicinal plants duly linked to the specific botanical entities. The medicinal plant species included in the database have been compiled and arranged under the six Indian Systems of Medicine namely **Ayurveda**(2559 botanical names/ 1540 species), **Siddha** (2267 botanical names/1149 species), **Unani** (1049 botanical names/493 species), **Homeopathy** (460 botanical names/372 species), **Sowa-Rigpa**(671 botanical names/250 species) and **Folk** (6403 botanical names/5376 species). [Read more...](#)

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Council of Scientific & Industrial Research (CSIR) Traditional Knowledge Digital Library



AYURVEDA



UNANI



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SOVARIGPA

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Representative Database of Ayurvedic, Unani, Siddha and Sowarigpa Formulations [More...](#)

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Welcome

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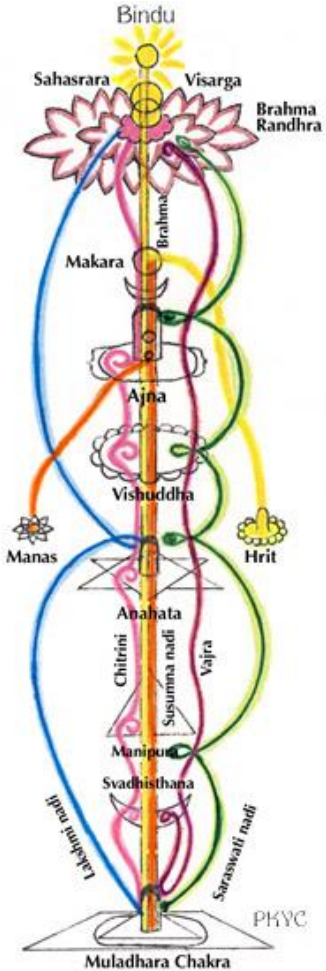
General Information

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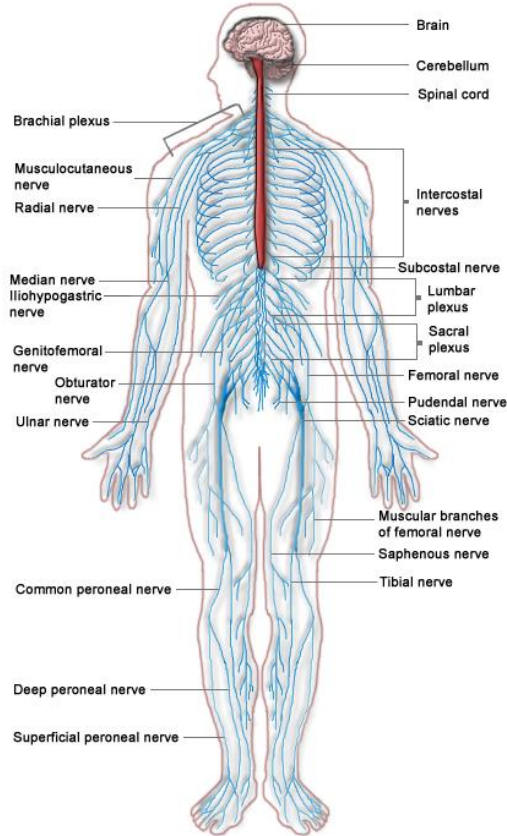
Subtle Energies & Subtle Srotas (स्रोतस्):

Strengthening, repairing, and detoxifying of the entire subtle body

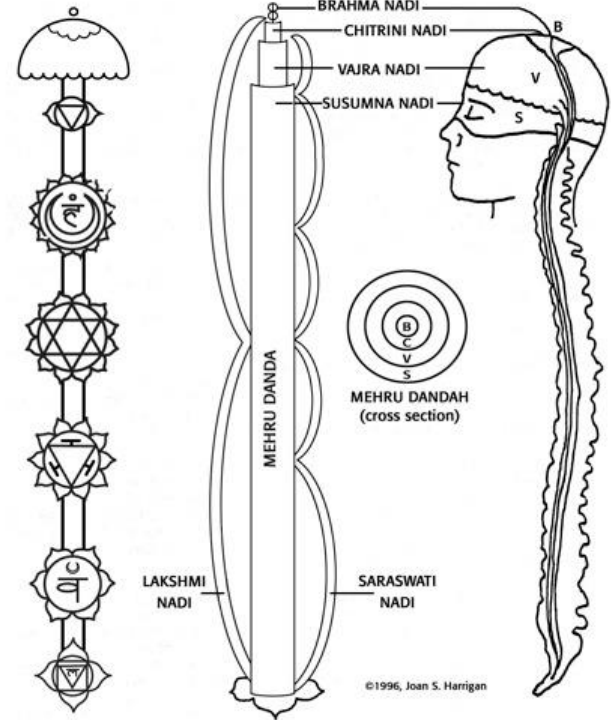
The subtle filaments of all causal healing



http://en.wikipedia.org/wiki/Deep_fibular_nerve#mediaviewer/File:Nervous_system_diagram.png



The Subtle Body: Container of Kundalini Shakti
Six Shakti Nadis



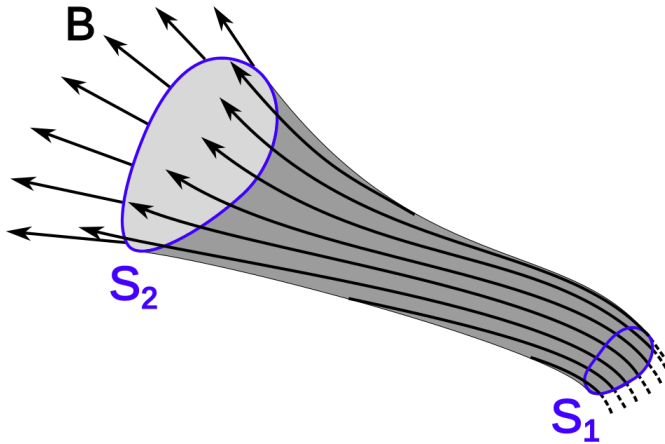
http://kundalinicare.com/?page_id=161

The Science of Meridians

The theoretical background of meridians, bioelectrical energy and nadis

Fröhlich's hypothesis of coherence in biological systems

introduced by Herbert Fröhlich in the late 1960s



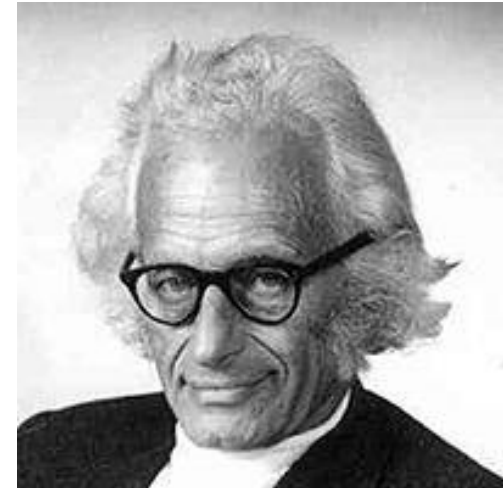
Fröhlich proposed a theory of coherent excitations in biological systems known as Fröhlich coherence.

A system that attains this state of coherence is known as a Fröhlich condensate.

Herbert Fröhlich FRS

(9 December 1905 – 23 January 1991)

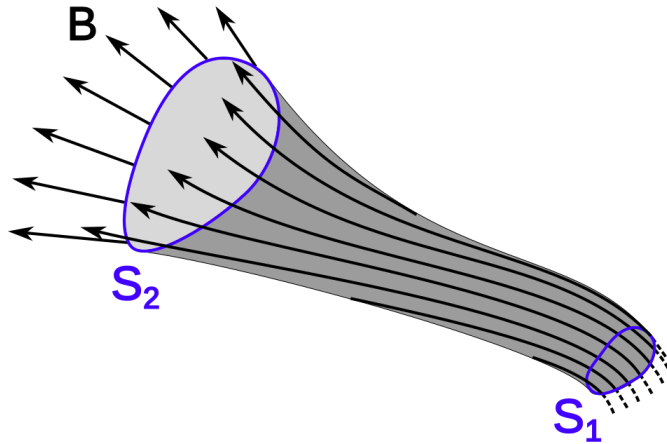
a German-born British physicist



The theoretical background of bioelectrical energy & the science of meridians

Fröhlich's hypothesis of coherence in biological systems

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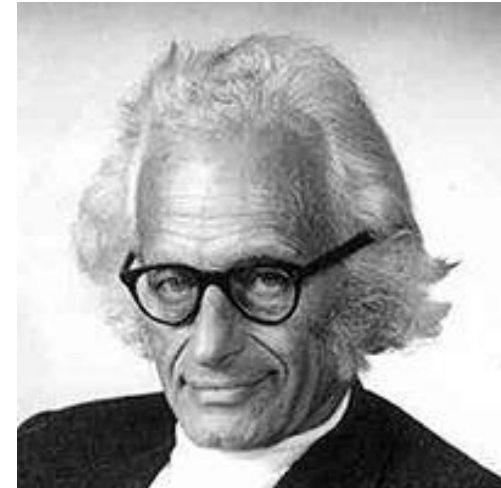
Herbert Fröhlich and F. Kremer
**Coherent Excitations in
Biological Systems** (Springer-
Verlag, 1983) ISBN 978-3-642-
69186-7

Herbert Fröhlich, editor
**Biological Coherence and
Response to External Stimuli**
(Springer, 1988) ISBN 978-3-
642-73309-3

Herbert Fröhlich FRS

(9 December 1905 – 23 January 1991)

a German-born British physicist



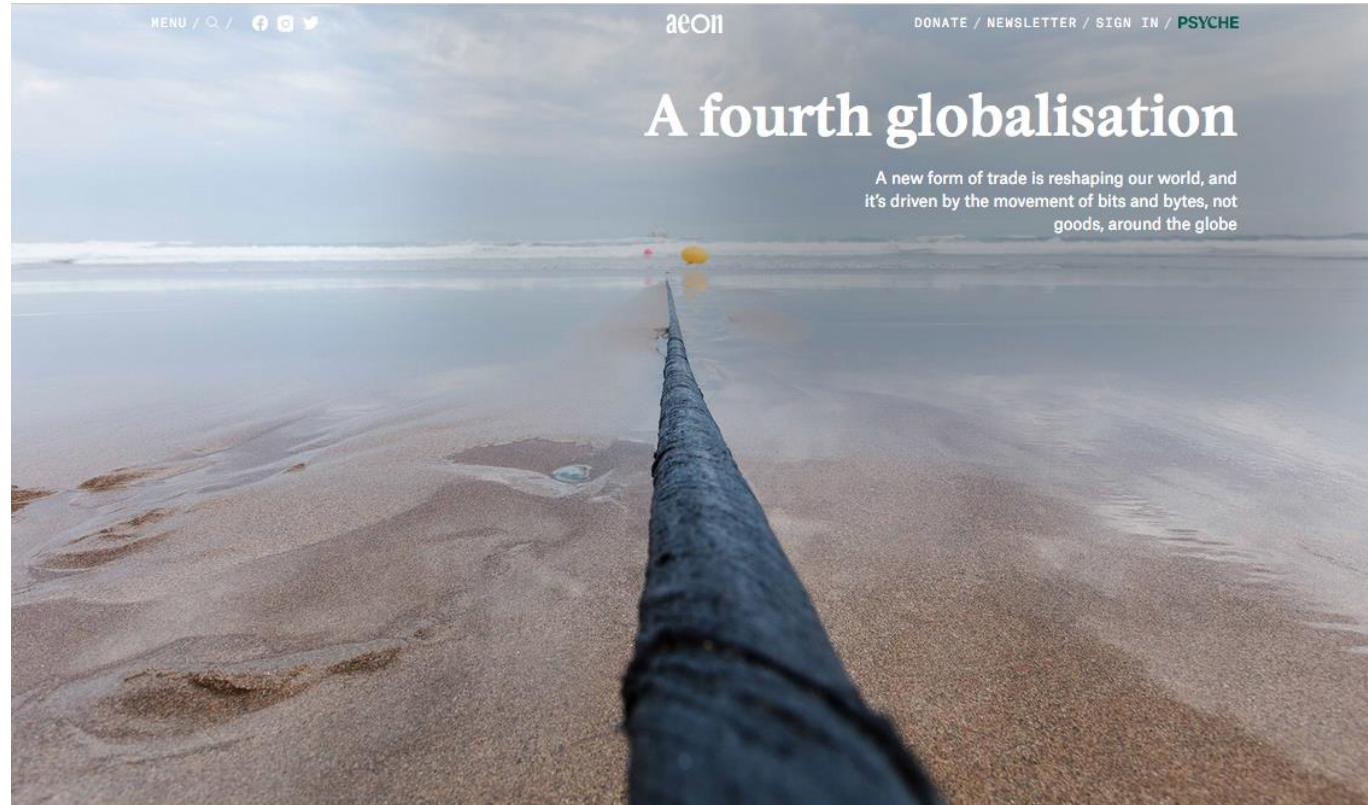
The 4th Globalization & The 5th Industrial Revolution

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Trade in manufactured goods peaked in 2008. The flow of investment into foreign businesses and factories crashed that same year

The MAREA undersea cable, running 6,600 km from Virginia Beach in the United States to Sopotana, near Bilbao, in Spain. Photo courtesy of Microsoft



<https://aeon.co/essays/the-globalisation-of-ideas-will-be-different-than-that-of-goods>