

1943

1969

2009

40 Years USGEB

of Roots

&

Shoots



Ewald R. Weibel
University of Bern
USGEB President 1969-1972

1943

1969

2009

40 Years USGEB

of Roots

&

Shoots



Why was USGEB founded in 1969?
What was the background?
Where did this lead?

1943

1969

2009

40 Years USGEB

of Roots

&

Shoots

USGEB was founded in a fascinating time of change — excitement — unrest — contrast



The Swinging Sixties

... Moon landing ...

"1968"

1943

1969

2009

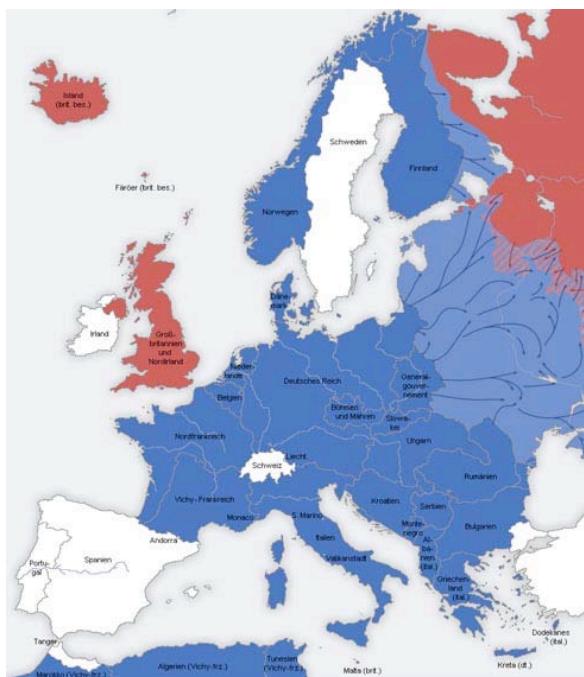
of Roots

40 Years USGEB

&

Shoots

The roots reach back to the period of
Second World War
1939-45

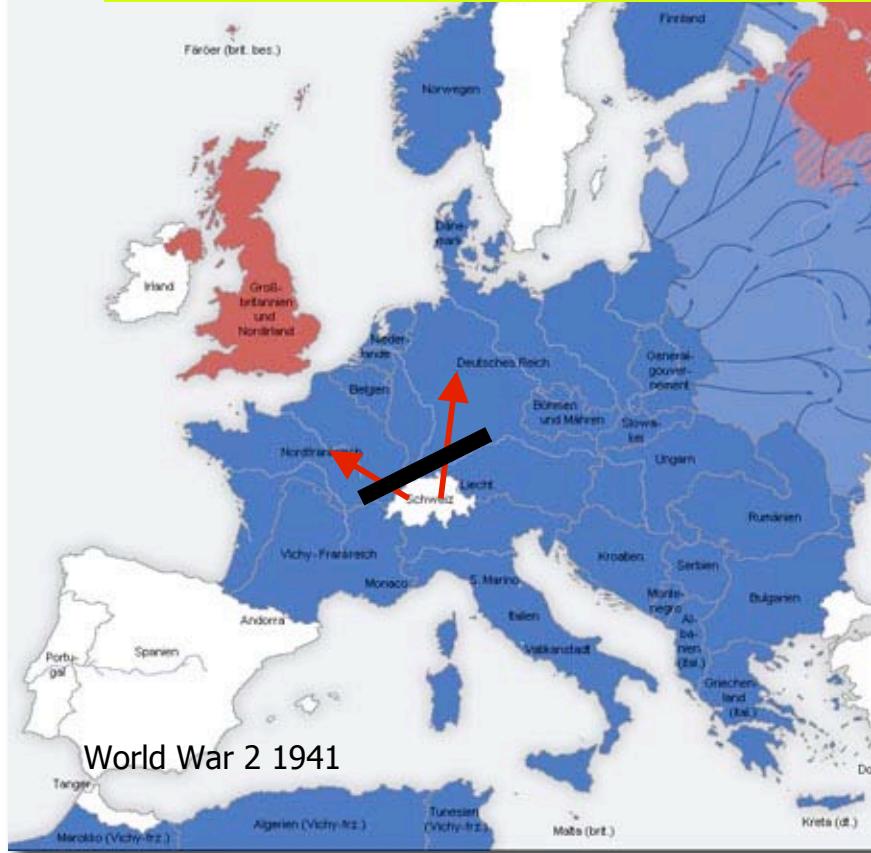


1943

1969

2009

Foundation of USGEB: the background — “the roots”



Effect of World War 2
on Swiss Culture & Science:

Isolation from traditional
contacts with neighbors ...

... *a new chance:*

Science in Switzerland must develop its own stature

1943

1969

2009

Foundation of USGEB: the background — “the roots”

Swiss science develops its own stature

Foundation of Swiss Scientific Societies & Institutions




Walter Rudolf Hess
(Nobelpreis 1949)

Swiss Society for Physiology, Physiological Chemistry & Pharmacology (1943)
(1934 Free Association of Swiss physiologists)

Association libre des Anatomistes des Universités Suisses
(founded 1934)

New Swiss Journals (1943):

- *Helvetica Physiologica et Pharmacologica Acta*
- *Helvetica Chimica Acta*
- *Acta Anatomica*
- *Experientia*

1943

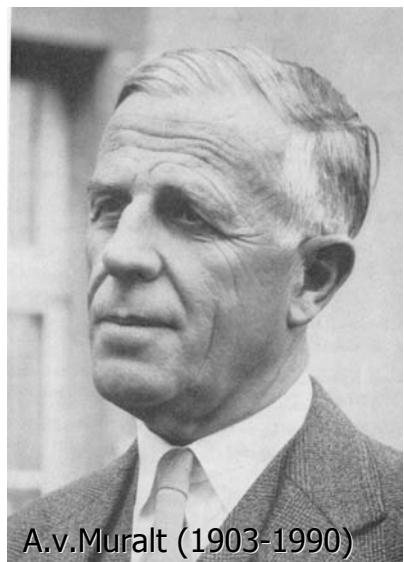
1969

2009

Foundation of USGEB: the background — “the roots”

Swiss science develops its own stature

Foundation of Swiss Scientific Societies & Institutions



A.v.Muralt (1903-1990)

**Swiss Academy of Medical Sciences
by Faculties of Medicine (1943)**

Stiftung biol.-med. Stipendien (1942)

*Alexander v. Muralt & Alfred Gigon
as main promoters*



1943 1952

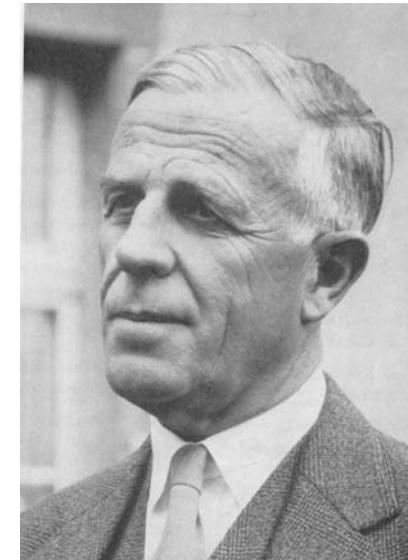
1969

2009

Foundation of USGEB: the background — “the roots”

1952: The all-important step:
Schweiz. Nationalfonds SNF

Alexander v. Muralt:
Chief promoter
as President of SNG
(Schweiz. Naturforschende Gesellschaft)



First President of
National Research Council
(1952-1968)

1943

1969

2009

Foundation of USGEB: the environmental conditions

USGEB was founded in a time of **excitement**



E.Kellenberger

1962: Werner Arber discovers
DNA restriction enzymes
(Nobelpreis 1978)

1962: Swiss Society for
Cell & Molecular Biology founded

Big steps in science:

In **biology**: new techniques
opened new fields:

cell biology
molecular biology



1943

1969

2009

Foundation of USGEB: the environmental conditions

USGEB was founded in a time of **change**

In academia:



Bundesrat
Hans-Peter Tschudi

"Hochschule Schweiz"

1.1.1969: Eidg. Hochschulförderungsgesetz
(financial support & coordination)

New institutions:

1964: ISREC Lausanne

1971: Biocenter Basel

Explosion of number of students

1943

1969

2009

Foundation of USGEB: the environmental conditions

USGEB was founded in a time of **change**

In academia:

Curriculum reform in medicine

"time for change had come"



Prof. Ettore Rossi

1967-1972 Rossi-Plan:

- *6 years curriculum to MD*
- **2 years basic sciences:**

integrated teaching by topics:

*Anatomy, Physiology & Biochemistry
of Respiration —
Colloquium on Pathology & Clinic*

1943

1969

2009

Foundation of USGEB: the environmental conditions

USGEB was founded in a time of **change**

Scientific communication becomes international

1967: Swiss Society for Physiology, Physiological Chemistry & Pharmacology intends to split:

- Swiss Society for **Physiology**
- Swiss Society for **Biochemistry** (founded 1958)
- Swiss Society for **Pharmacology**

Goal: • *relation to International Scientific Unions*

Result: • *Swiss Societies small, few members
"familiar" groups*
• *communication increasingly specialized, narrow*

1943

1969

2009

Foundation of USGEB: the environmental conditions

1960s: Re-migration of young biologists from post-doc fellowships

The US experience:

FASEB meetings in Atlantic City:

The Boardwalk as main meeting place



Cross-talk between physiologists, cell biologists, biochemists etc.

1943

1969

2009

Foundation of USGEB: the environmental conditions

Café de la Radio Genève



13 September 1967

Conception of
"Swiss FASEB"

Create a platform to
get societies together to
foster interdisciplinary
dialogue & collaboration



1943

1969

2009

Foundation of USGEB

15 March 1969: Assembly of Delegates of

- Swiss Society for Physiology
- Swiss Society for Biochemistry
- Swiss Society for Pharmacology
- Swiss Society for Cell & Molecular Biology



in Bern decides to found

Union of Swiss Societies for Experimental Biology

and to hold annual joint meetings.

17 May 1969: official Foundation Meeting in Bern and

First USGEB Meeting (17-18 May 1969)

1943

1969

2009

Foundation of USGEB

17 May 1969: **Foundation Meeting of USGEB** in Bern

“Gemeinschaftshörsaal” (1967)
of *Institutes of Anatomy, Physiology & Biochemistry*
for integrated lectures



1943

1969

2009

Foundation of USGEB

17 May 1969: **Foundation Meeting of USGEB** in Bern

in presence of Bundesrat Hans-Peter Tschudi

Addresses by

Jean Posternak

outgoing President of Swiss Society for Physiology

Ewald Weibel

new President of USGEB

Paul Huber

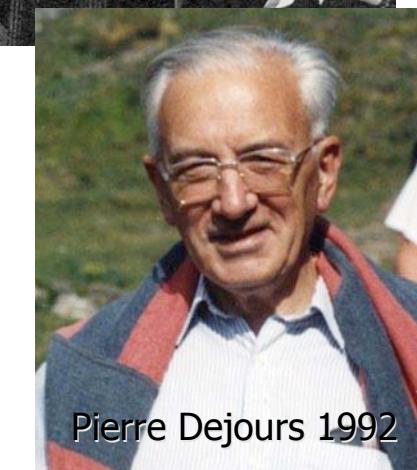
President of SNG (SC|NAT)



Keynote Lecture by

Pierre Dejours, Strasbourg CNRS

"*La régulation de la respiration en haute altitude*"



Followed by demonstrations & free communications

1943

1969

2009

Foundation of USGEB

Jean Posternak on 17 May 1969:

"Il s'agissait, tout en préservant l'autonomie des sociétés spécialisées et leur affiliations internationales, de renforcer leur collaboration. Il fallait aussi rendre possible l'élargissement du colloque interdisciplinaire."



The **evolution of biology** towards increasing **specialization** must be **accepted** ... but **not put up with**.

Create a platform to **facilitate the interdisciplinary dialogue** between active **experimental biologists** of **all disciplines**

That is the idea of USGEB

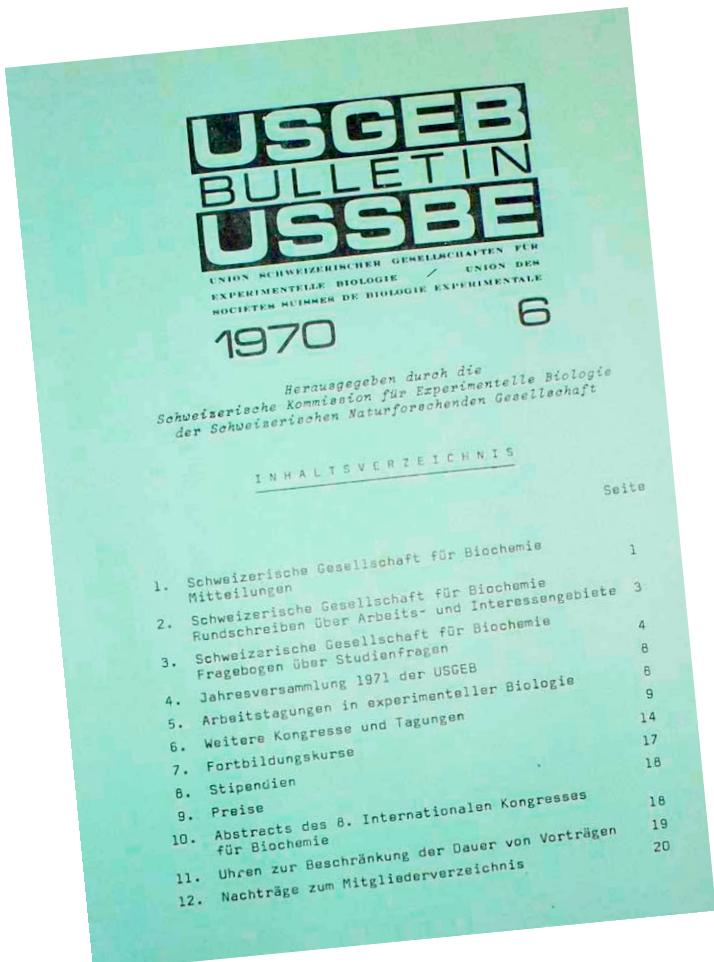
1943

1969

2009

The Evolution of USGEB

Union of Swiss Societies for Experimental Biology



Constituent Societies (1969):

- Swiss Society for Physiology
- Swiss Society for Biochemistry
- Swiss Society for Pharmacology
- Swiss Society for Cell & Molecular Biology

Joined later:

- Swiss Society for Nutrition
 - Swiss Society for Anatomy, Histology & Embryology
 - Swiss Society for Oncology
 - Società Ticinese delle Scienze Biomediche
-

1943**1969****2009**

The Evolution of USGEB

Committee & Presidents

<i>Period</i>	<i>President</i>	<i>Place of committee</i>
2007-	Hans-Uwe Simon	University of Berne
2005-2007	Bernhard Erni	University of Berne
2002-2005	Sandro Rusconi	University of Fribourg
1999-2002	Denis Monard	Friedrich Miescher Institute Basel
1996-1999	Claude Bron	University of Lausanne
1993-1996	Kaspar Winterhalter	ETH Zuerich
1990-1993	Bernard Mach	University of Geneva
1987-1990	Herbert Fleisch	University of Berne
1984-1987	Heinz Tobler	University of Fribourg
1981-1984	Paul Walter	University of Basel
1978-1981	Eric Jéquier	University of Lausanne
1975-1978	Max Birnstiel	University of Zurich
1972-1975	Bernard Jeanrenaud	University of Geneva
1969-1972	Ewald Weibel	University of Berne

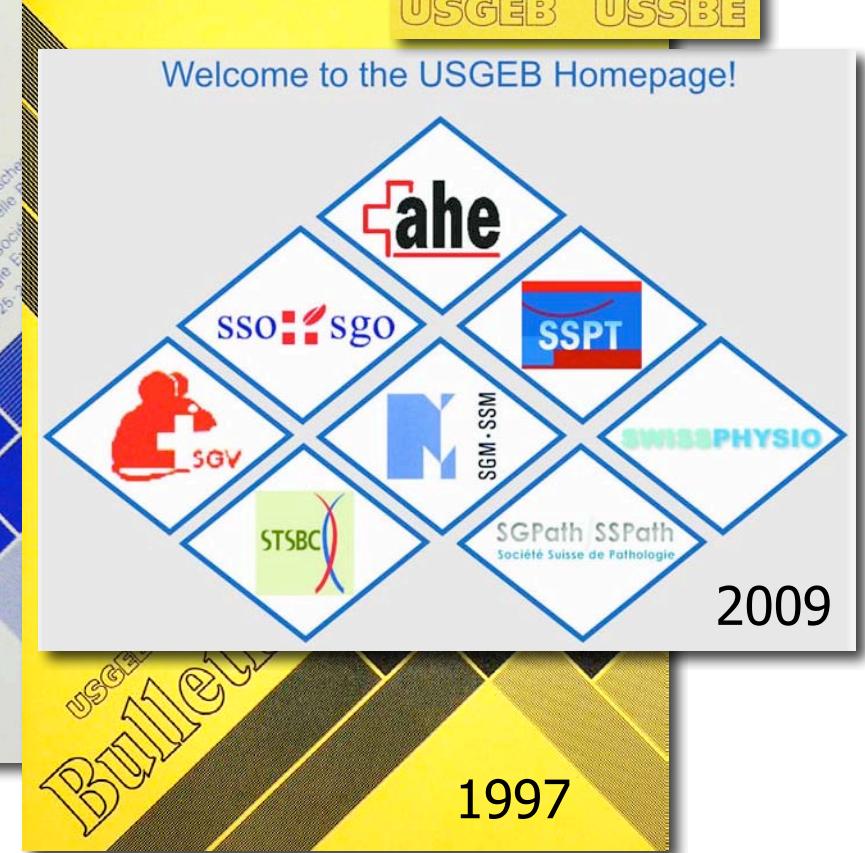
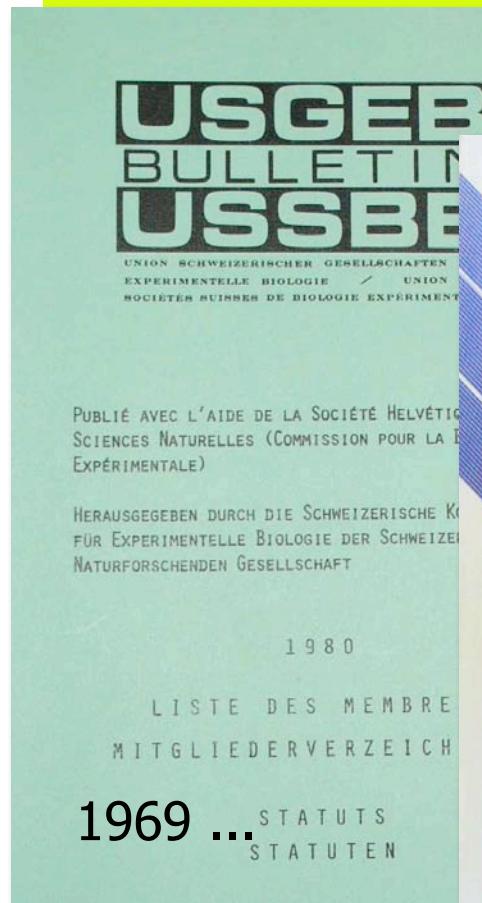
1943

1969

2009

The Evolution of USGEB

“Corporate Identity”



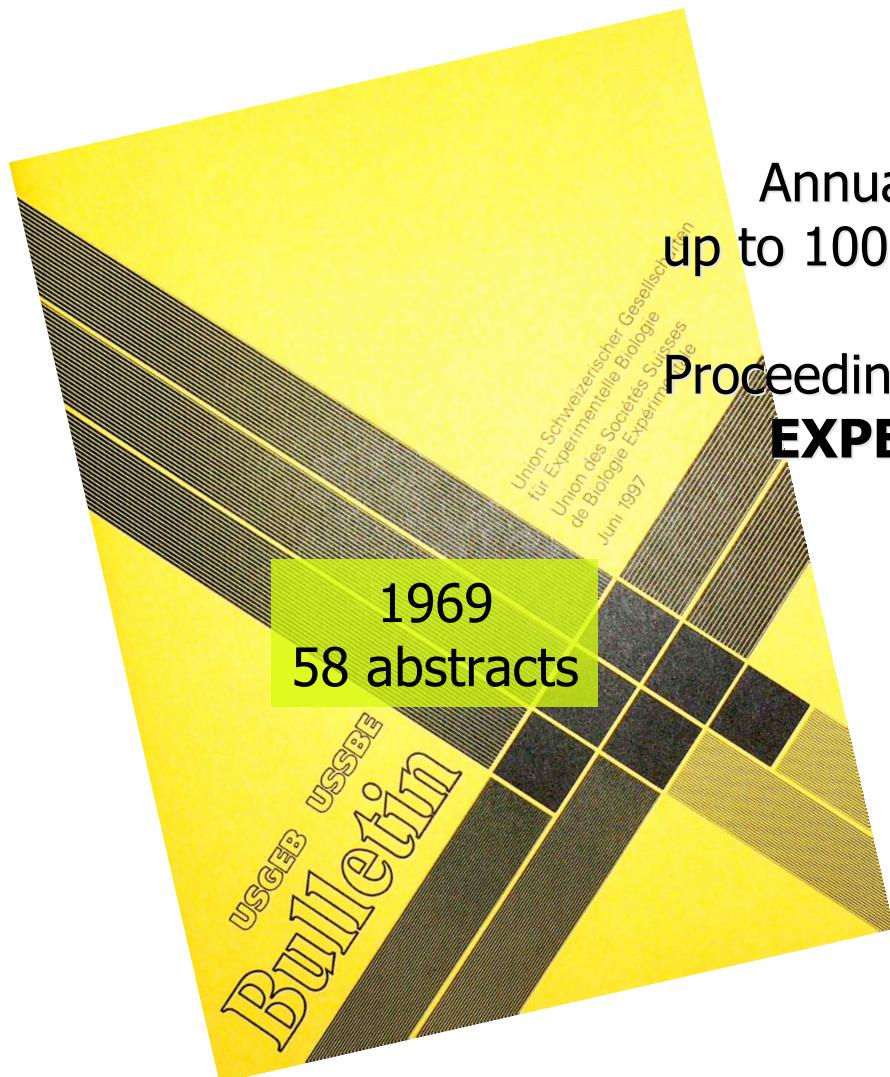
1943

1969

2009

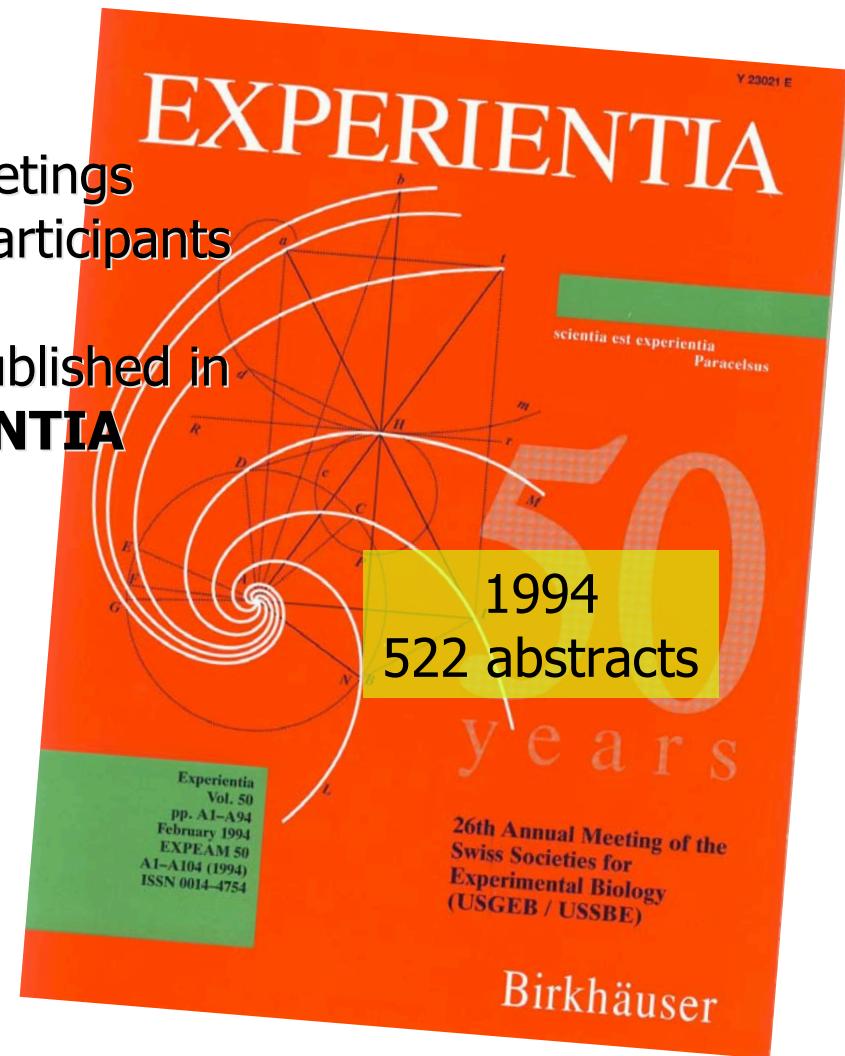
The Evolution of USGEB

The Science



Annual Meetings
up to 1000+ participants

Proceedings published in
EXPERIENTIA



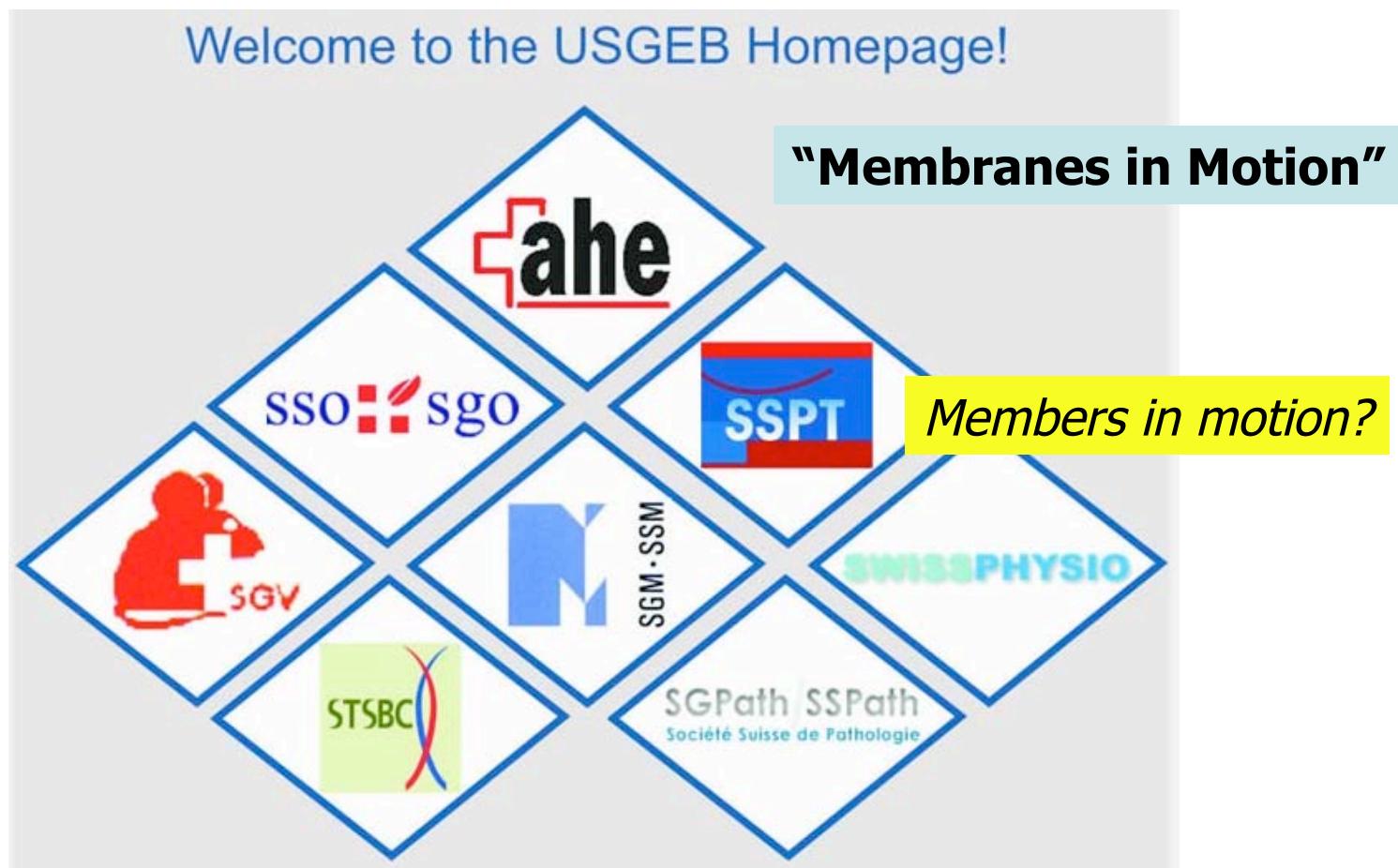
1943

1969

2009

The Evolution of USGEB — the shoots

Where is USGEB in 2009?



1943

1969

2009

The Evolution of USGEB — the shoots

The Mission 2009:

- The Union of Swiss Societies for Experimental Biology (USGEB) is a non-profit organization dedicated to promoting molecular biology within the Swiss Academic Community, and to addressing the social, ethical and economic issues raised by the rapid progress of the molecular life sciences.



Is this enough?

Where is „biology“, the life sciences as a whole??

Where is physiology, where is cell biology?

Where is the interdisciplinary dialogue?

Where is the „big picture“ that makes life??

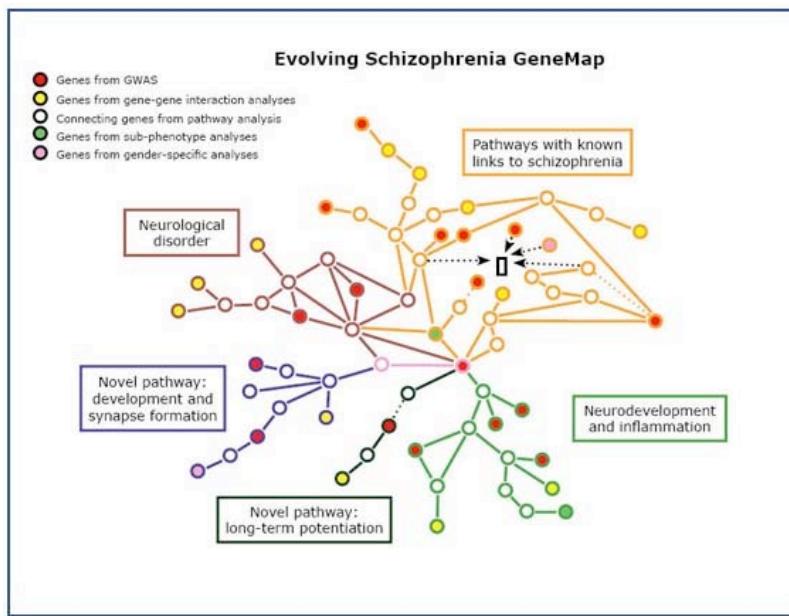
1943

1969

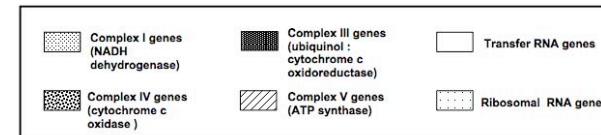
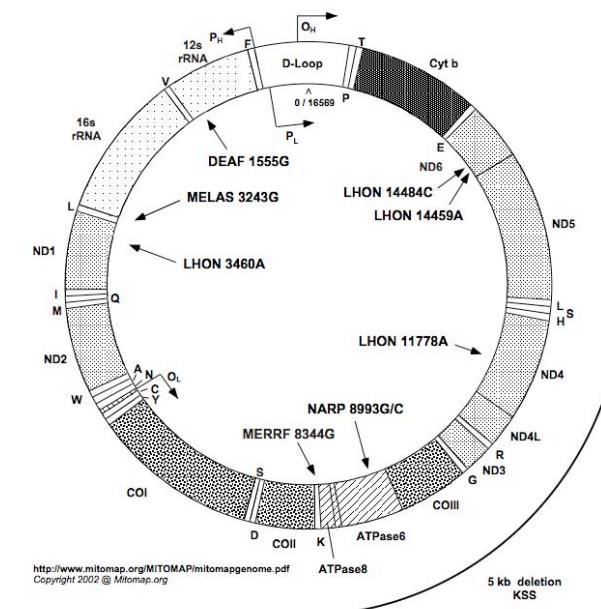
2009

The Evolution of USGEB — the shoots

Gene maps are essential — but not sufficient



Schizophrenia GeneMap



Mitochondria

1943

1969

2009

The Evolution of USGEB — the shoots

The Mission 2009:

- The Union of Swiss Societies for Experimental Biology (USGEB) is a non-profit organization dedicated to promoting molecular biology within the Swiss Academic Community, and to addressing the social, ethical and economic issues raised by the rapid progress of the molecular life sciences.



The mission 1969:

The **evolution of biology** towards increasing **specialization** must be **accepted ... but not put up with.**

Create a platform to **facilitate the interdisciplinary dialogue** between active **experimental biologists of all disciplines**
that was the idea of USGEB

1943

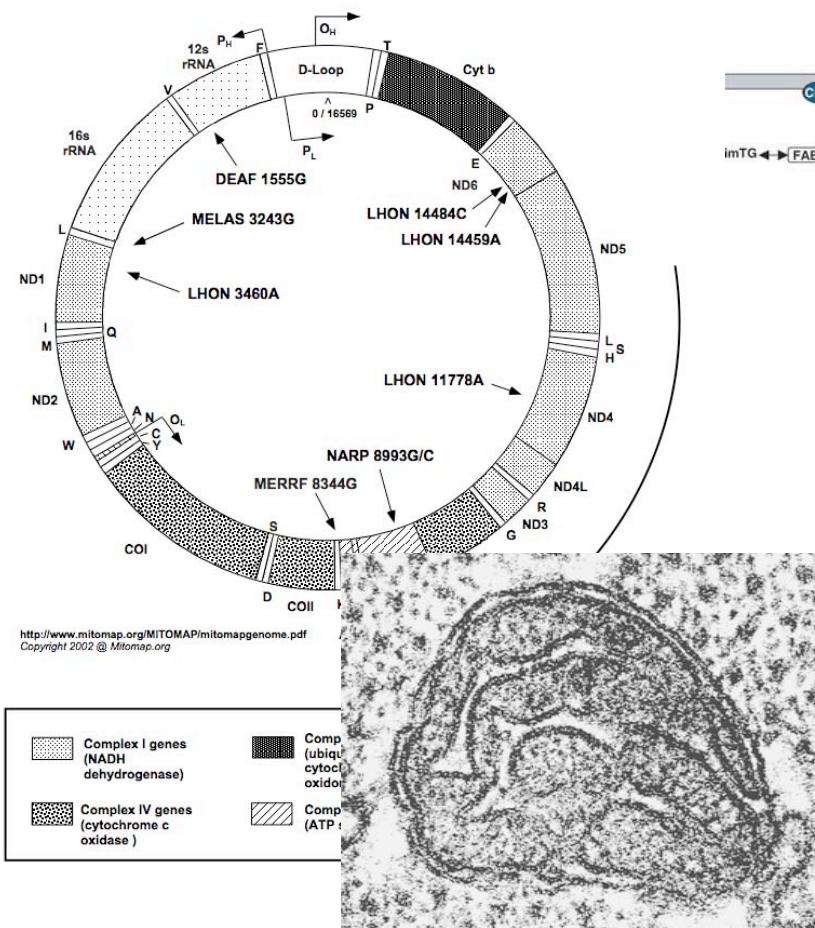
1969

2009

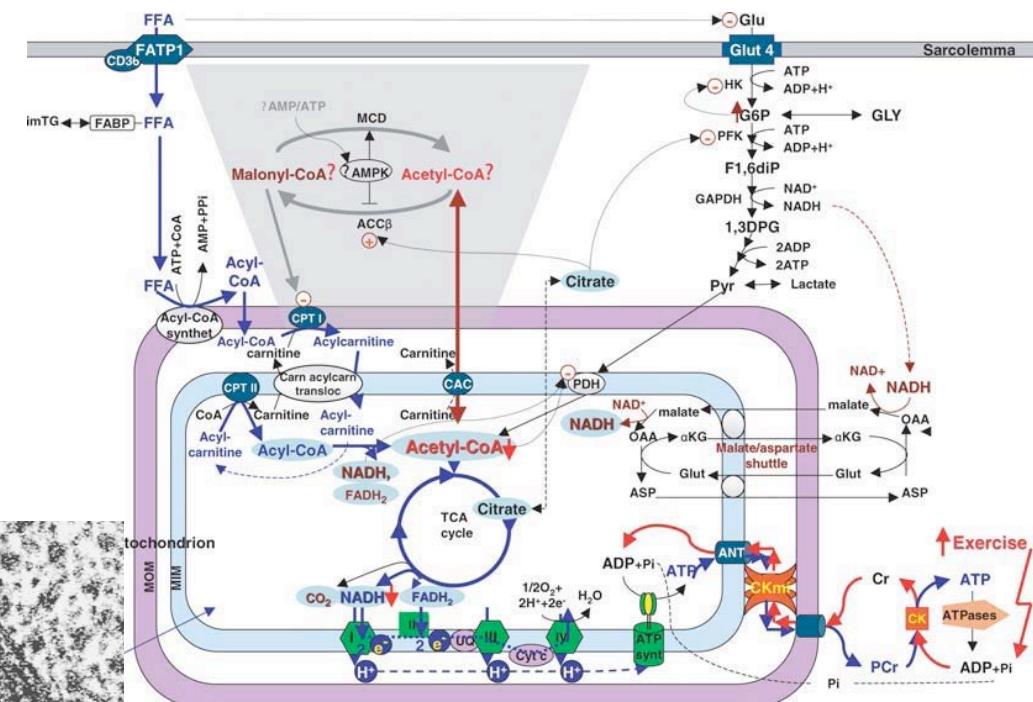
The Evolution of USGEB — the shoots

The case of mitochondria

Genetic map



Functional map: Fuel oxidation



(Saks, Wallimann et al. 2006)

1943

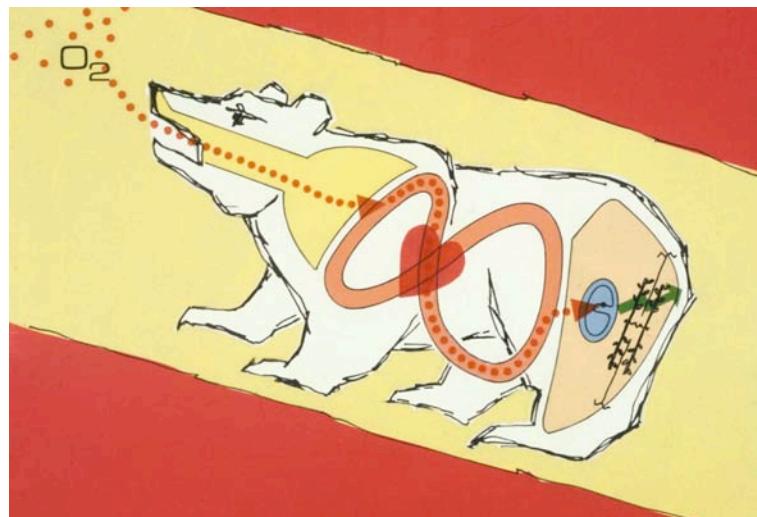
1969

2009

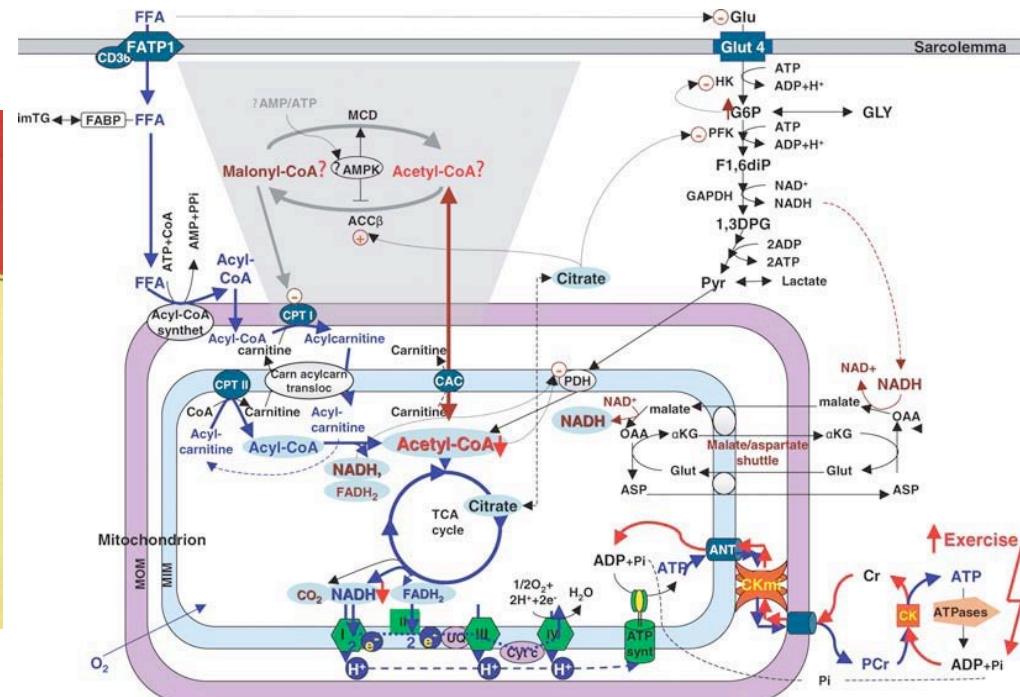
The Evolution of USGEB — the shoots

The case of mitochondria

Involves the organism



Functional map: Fuel oxidation



1943

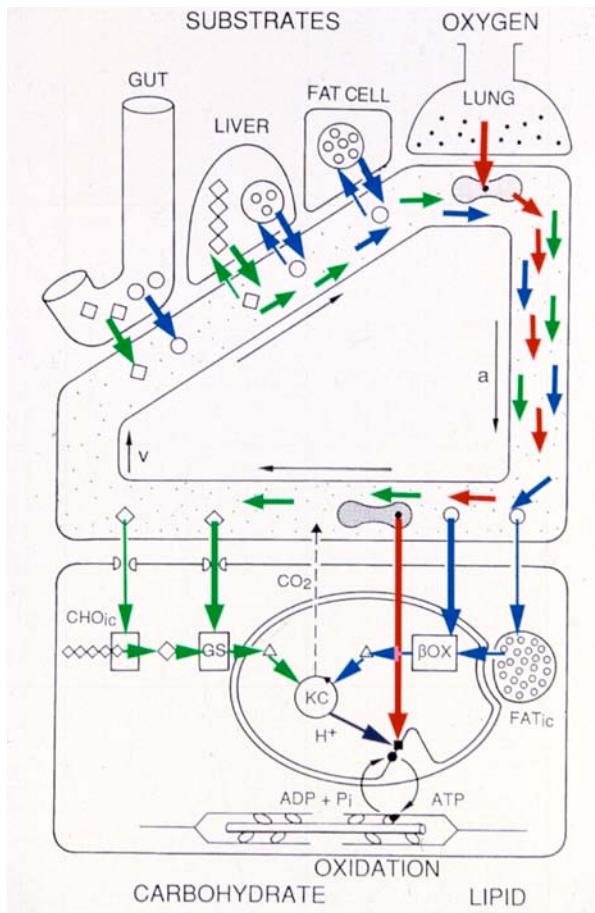
1969

2009

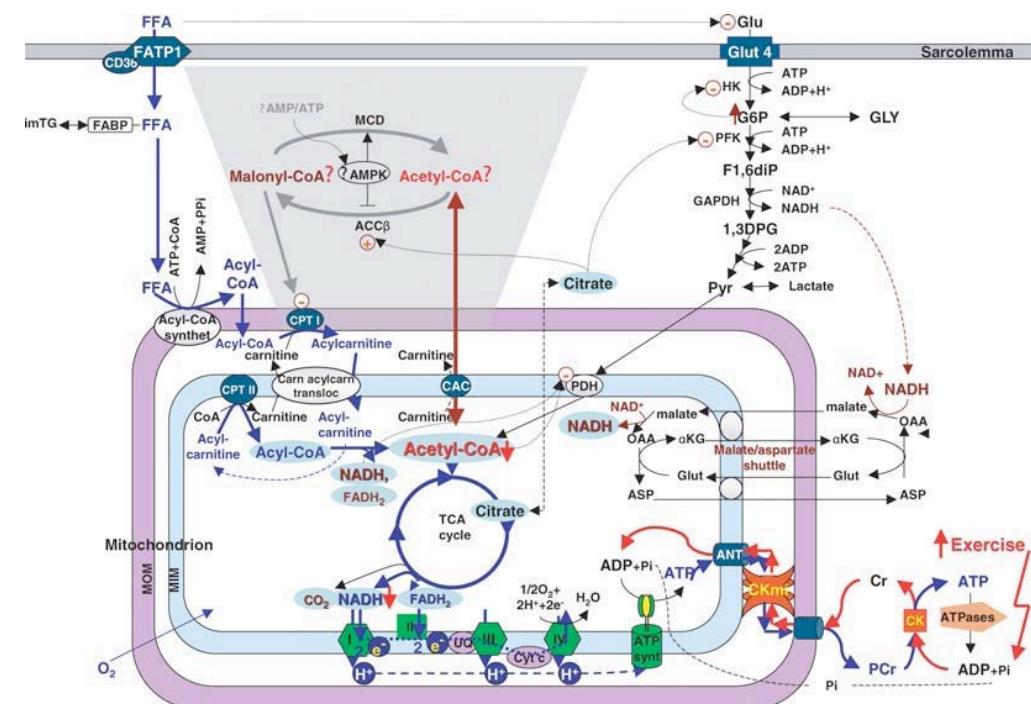
The Evolution of USGEB — the shoots

The case of mitochondria

Involves the organism



Functional map: Fuel oxidation



1943

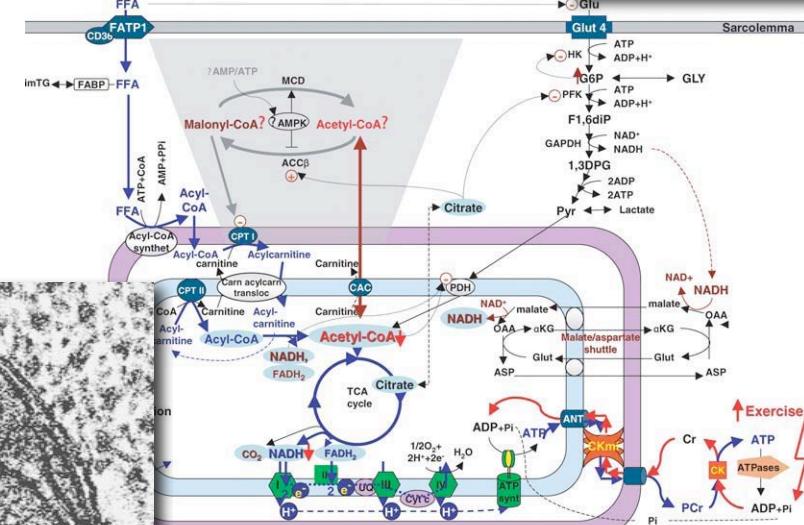
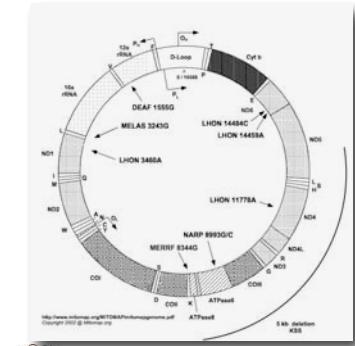
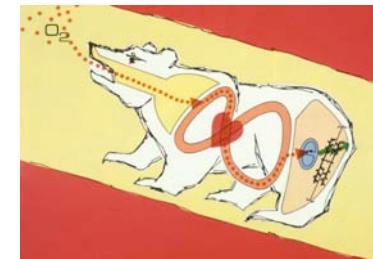
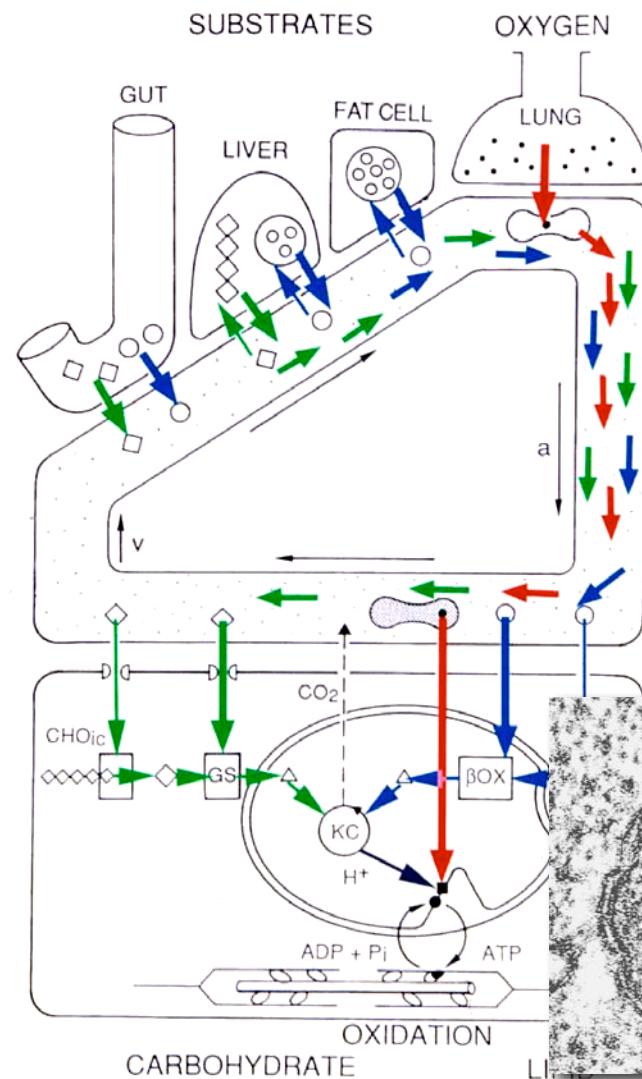
1969

2009

The Evolution of USGEB — the shoots

The case of mitochondria ...

... a case for **systems biology**



1943

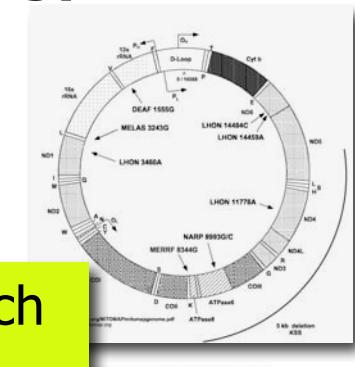
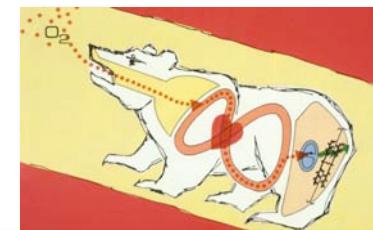
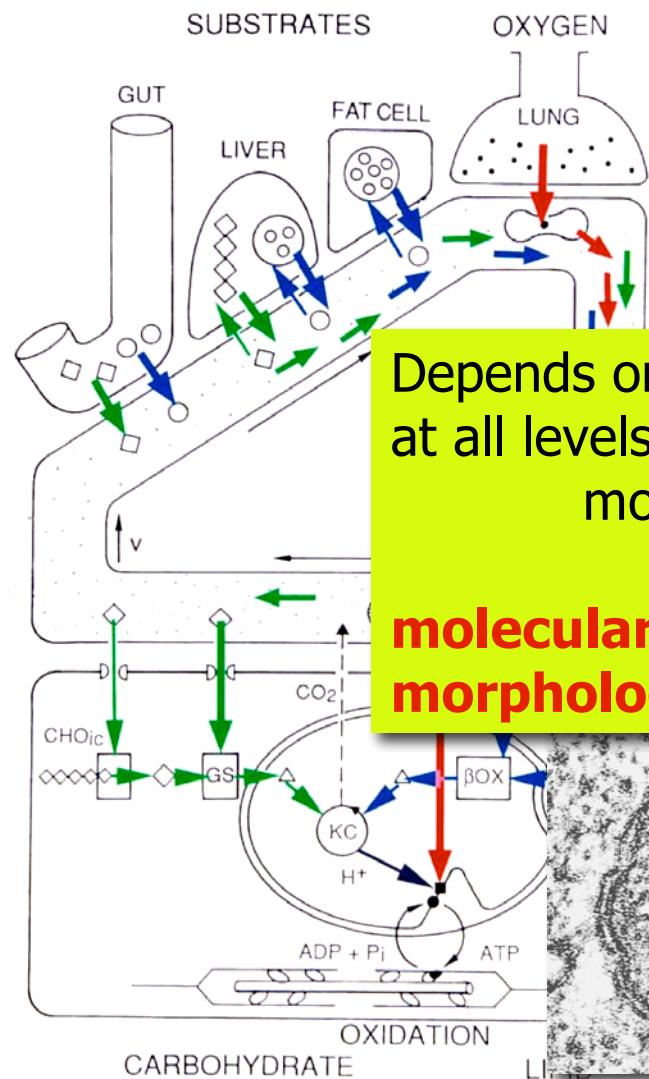
1969

2009

The Evolution of USGEB — the shoots

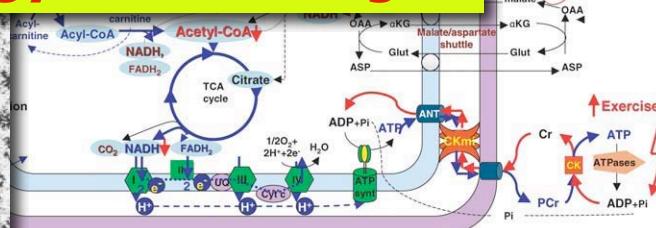
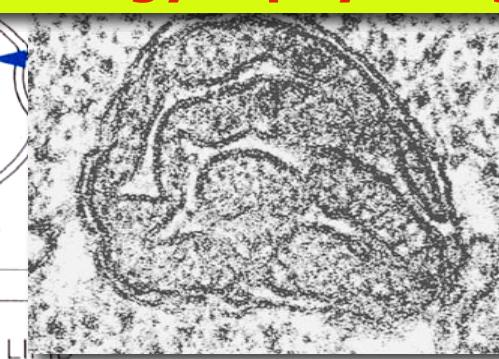
The case of mitochondria ...

... a case for **systems biology**



Depends on structured collaborative research
at all levels of organization
molecules - cells - organism

**molecular biology & cell biology &
morphology & physiology are challenged**



1943

1969

2009

The Future of USGEB

The Mission beyond 2009:

The contemporary translation of the Mission of USGEB should be

- to foster **Systems Biology**
at **all** its **levels**
in **all** its **aspects**
- to promote the **integration of structure & function**
in all research & teaching activity in biology & medicine
- to facilitate the **interdisciplinary dialogue** to help
bridge the communication gap between specialists

This should remain the philosophy at the basis of USGEB

This is its raison d'être

...

1969

2009

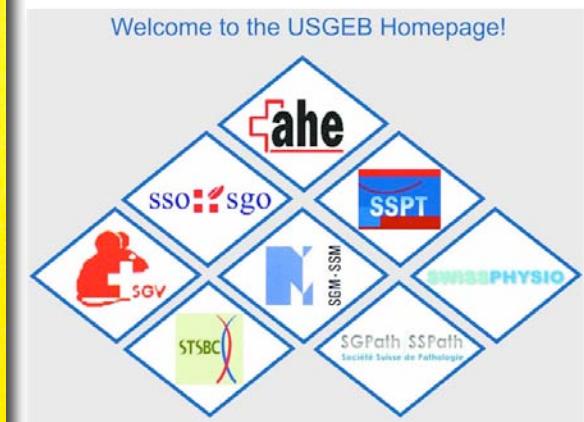
....

40 Years USGEB

of Roots

&

Shoots



Best wishes for the years beyond !