Meet Sanae Ariga from Hokkaido University! **♥** Name: Sanae M. M. Iguchi-Ariga



"Step Forward for Your Dream!"

Retinitis

Apoptosis

Proliferation

**♠** Research Area: Molecular Biology, Cell Biology, Biochemistry

**♦** Affiliation: Graduate School of Agriculture Graduate School of Life Science

**Hokkaido** University

**♣** Position: Professor / Vice-Executive

Head of Support Office for Female Researchers





- from Genes to Animals -

Pigmentosa Various Diseases as well as Cancer Differentiation **Death Signals (Apoptotic Signals)** Pim-1 **Growth Signals** PAP-1

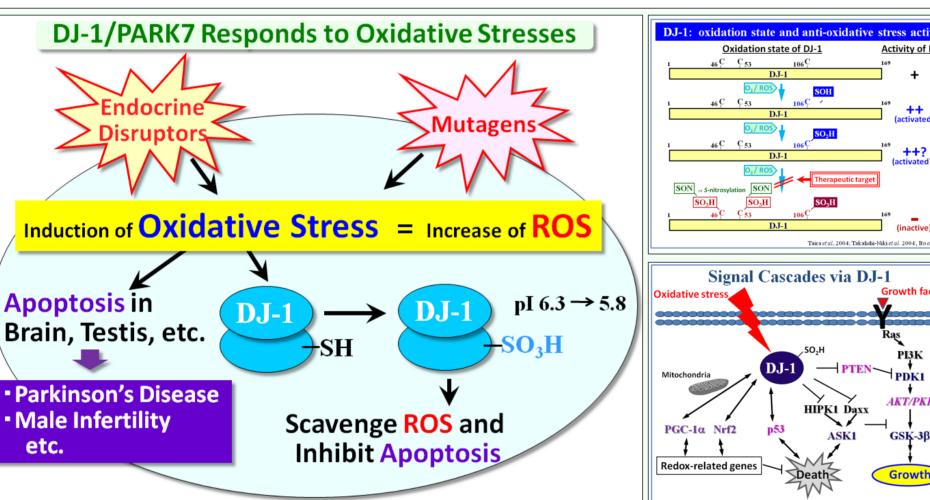
> Proliferation **Transformation** Differentiation Apoptosis DJ-1 Anti-oxidation Male Infertility

**Proteolysis** 

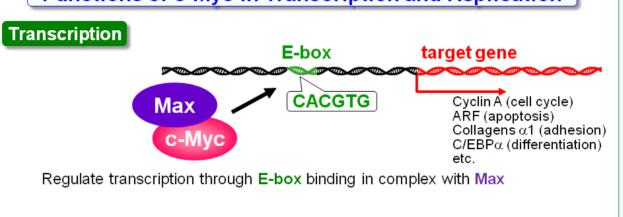
**Our Focus:** Protooncogenes related to

**Endocrine Disruptors** 

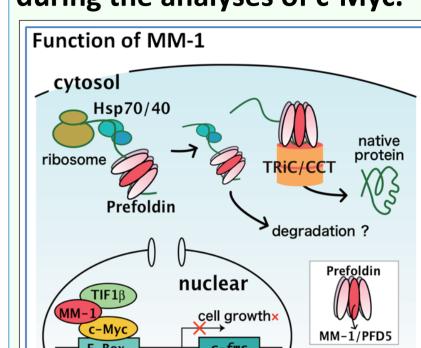
### Parkinson's Disease



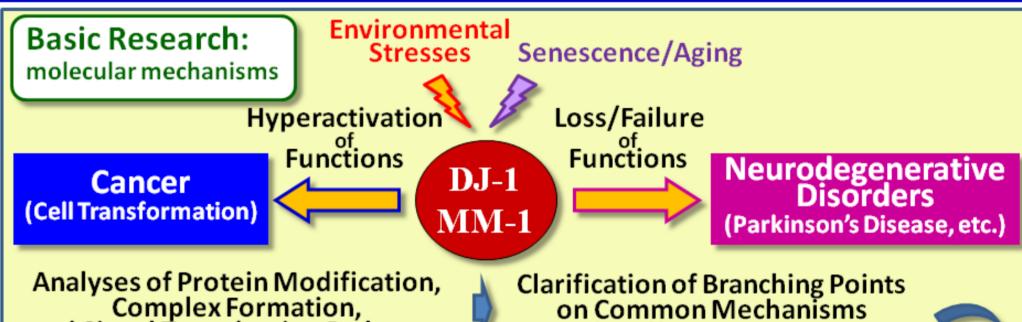
We have uniquely cloned several oncogenes including DJ-1, MM-1, and PAP-1 during the analyses of c-Myc. Functions of c-Myc in Transcription and Replication



Replication Promote transition from pre-RC to pre-IC



#### **Common Basis for Neurodegenerative Disorders and Cell Transformation**



and Signal Transduction Pathways Drug Discovery:

towards Different Consequences

Targeting the (Common) Proteins at the Branching Points

in silico modification to maintain appropriate functions

**Potential** Preventer/Curative

**SOS Child Care** 

System

"TRICYCLE"

on Demand of

Sudden Fever or

Unexpected Injury

Search / Screening of Candidate Compounds Binding to the Regulatory Domain of DJ-1

Promotion of Life Innovation for Hopeful Future of Aging Society Since DJ-1 has turned out to be responsible not only for cell transformation

but also for familial Parkinson's disease, common and respective pathways of

cancer and neurodegenerative disorders via DJ-1 are our hot issues.

# Interests - in Gender Equity in Science, etc.

"Girls Be Ambitious!" Plans at Hokkaido University "20% by 2020" (Triple Twenties Policy)

Increase the Female Ratio in Hokudai Researchers to 20% by 2020!

NEEDS-driven Develop and realize support plans in response to female researchers' voice

Support Office for Female Researchers

VISION-driven **Increase diversity of** 

human resource to reinforce research activity

**Numbers** 

**Basic frame and systems** have been established: promote further expansion and improvement

**Environment** 

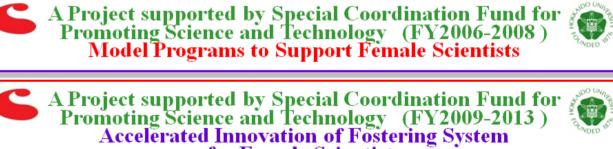
"Positive Action Hokudai-Scheme" boosted increase of female faculties: continues until 2020 and gears up for STA fields

Applying several MEXT funding programs, **Hokkaido University is propelling** promotion of female scientists as well as young scientists in general.

prospect of

preventer/curative

for Female Scientists



**Support Career Progression in case of** 

**Pregnancy or Upbringing of Children** 

University/Institution should prepare the environment

where young female researchers can be warmly welcome

Supporting Mom-Scientists "to be counted"

**Problematic Issues for Appointing Female Faculties** Fewer women apply. Encourage Girl Students and High School Girls into Research Women candidates are few: In certain fields, girl students are few. Women candidates don't apply: 

"Be Confident and Take a Chance!" Women are more modest/humble than men?! Modesty is virtue?!

Atmosphere/circumstances easily lead women to give up. Women dare not apply for good posts with less possibility. Women with much load/burden don't want to 'waste' time/energy. Risk-adverse instinct is stronger in women?!

Women candidates can't apply: Serious Problem for Regional Universities as well Women are anchored where family live. "Dual Career" problems also concern.

Fewer women are selected. Women candidates are less expected: Possible 'absence' or 'less active period' and overcharge on surroundings are highly concerned.

Women candidates are less evaluated: Evaluation focusing on "numbers of publications" (total / in recent years) are often unfavorable for female researchers with loads of childbirth/childcare

Expansion of Childcare and Human Support Careful Evaluation of Overall Ability and Potential

**♥**Temporary replacement or supporting staff for research and other lab work ♥ Research assistant or secretary for 20 – 30 hours/week hired by university budget ♥ Assist lab work, or lessen non-research works to allow

**▼**Temporary nursing / day-care service responding to kid's sickness or emergency

Mom-scientists to concentrate their research for limited time

♥ Contract between university and group of nurses © Registered female researchers should just call on emergency Charge is partially supported by university **Prerequisite Conditions for Positive Action** 



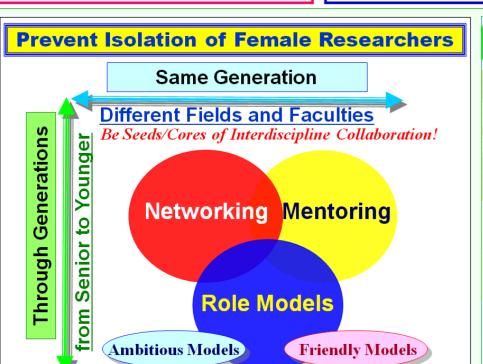
No longer denied nor underestimated unreasonably just because they are women, more female researchers are to be recruited as important parts of diversity, but.... for development and sustainability of their career, appropriate "Accelerator" or "Catalyst" is still desirable.



No "Quota" but "Incentive" to assign female faculty \*Additional staff cost to relevant Faculty on assignment of female faculty member

Sanae's Domestic **Collaborators** 







## **Affirmative Actions in Hokkaido University**

"Family are not my inhibitor but activator/promoter: F3 Project: Sometimes they just regulate

Recruitment open only for women in STEM fields (25 posts in 5 years)