# Noriaki Sakuragi

(IS4)



# CURRICULUM VITAE

# Noriaki Sakuragi

Professor Emeritus, Department of Obstetrics and Gynecology, Hokkaido University Graduate School of Medicine

#### Academic Degrees

- Mar 1976 M.D. Hokkaido University School of Medicine
- Mar 1982 Ph.D. (D.Med.Sci) Hokkaido University Graduate School of Medicine

### **Previous Appointments and Positions**

2002-2017 Professor and Chairman, Department of Gynecology (Reproductive Endocrinology and Oncology), Graduate School of Medicine, Hokkaido University

2010-2017 Director, Cancer Center, Hokkaido University Hospital

#### **Research Interest**

Nerve-sparing radical hysterectomy for cervical cancer HPV screening and prevention of cervical cancer Molecular mechanism of high-grade endometrial carcinogenesis

#### Awards and Honors

| 1999      | Ohno Research Award, Hokkaido Society of Obstetrics and Gynecology         |
|-----------|--|
| 2011      | Hokkaido Medical Association Award   |
| 2011      | Hokkaido Governor Award  |
| 2013-2016 | Visiting Professor, Fudan University Obstetrics and Gynecology Hospital    |
| 2013-2016 | Visiting Professor, Fudan University Shanghai Medical College              |
| 2014      | Honorary Fellow, Korean Society of Obstetrics and Gynecology               |
| 2015      | Honorary Fellow, Korean Society of Gynecologic Oncology and Colposcopy     |
| 2017      | Honorary Fellow, Taiwan Association of Obstetrics and Gynecology           |
| 2020      | Sugimoto Award, Japan Society of Gynecologic and Obstetric Endoscopy and   |
|           | Minimally Invasive Surgery (JSGOE)   |
| 2022      | Chien Tien Hsu Memorial Lecture, Asia and Oceania Federation of Obstetrics |
|           | and Gynaecology  |
|           |  |

Publications in English (H-index by Web of Science: 49)

Original articles (peer reviewed journals) 210

# A practical approach to paracervical tissue dissection in nerve-sparing radical hysterectomy

Noriaki Sakuragi, MD, PhD Professor Emeritus, Hokkaido University Women's Healthcare Center, Otaru General Hospital

Surgical anatomy bridges the gap between anatomical knowledge and surgical theory in order to perform cancer surgery safely and effectively. In recent years, the study of pelvic anatomy has played a major role in its application to cervical cancer surgery. The mechanisms of autonomic nerve injury in radical hysterectomy are mainly bladder nerve injury due to transection of the posterior layer of the vesicouterine ligament and damage to the pelvic plexus itself due to transection of the vagina.

The bladder nerve branches arising from the upper and middle parts of the pelvic plexus are mainly sympathetic and divide into lateral and medial branches at the terminal ureter. On the other hand, the bladder nerves arising from the lower part of the anterior border of the pelvic plexus contain both parasympathetic and sympathetic nerves and pass medially to the terminal ureter to the bladder. The main parasympathetic nerves are therefore located in the medial part of the posterior layer of the vesicouterine ligament. Preservation of the bladder nerves passing medially to the ureter is crucial. To achieve this, we selectively sever the uterine nerve branches and free the pelvic plexus and bladder nerves from the lateral aspect of the vagina and rectovaginal ligament.

Based on our actual surgical experience and studies on fresh cadaver dissections, I want to attempt to describe our nerve-sparing surgery. We would like to receive feedback from the participants in order to further improve the nerve-sparing surgery.

Yutaka Osuga (IS5)



# CURRICULUM VITAE

# Yutaka Osuga, MD, PhD

- Professor and Chair, Obstetrics and Gynecology, Graduate School of Medicine, the University of Tokyo
- Deputy director, the University of Tokyo Hospital
- Vice Chairperson of the Executive Board, Chairperson of International Relations Committee, Japan Society of Obstetrics and Gynecology
- President, Japan Society for Reproductive Medicine
- President, Japan Society of Fertilization and Implantation

Prof. Osuga received his MD in 1985 and PhD in 1995 from the Faculty of Medicine of the University of Tokyo, Japan. He completed his OB/GYN residency training at the University of Tokyo. He trained as a postdoctoral fellow in the field of ovarian physiology in Stanford University from 1995 to 1997. He is board certified by Japan Society of Obstetrics and Gynecology, Japan Society of Gynecologic and Obstetric Endoscopy and Minimally Invasive Therapy, Japan Society for Reproductive Medicine, and Japanese Society of Anti-Aging Medicine.

Prof. Osuga provides clinical services in gynecology and reproductive medicine with special expertise in laparoscopic surgery and assisted reproductive technology. His main research targets cover a wide variety of physiology and pathology of reproduction including endometriosis, implantation, folliculogenesis, and reproductive aging. He has authored over 500 research papers published in eminent peer-reviewed journals and has written and edited many textbooks. He serves as an executive board member of several medical groups and associations and an editor of several international journals. He is frequently sought out to provide his expertise at international medical conferences and academic institutions.

# Comprehensive approach to have healthy baby in women with adenomyosis

#### Yutaka Osuga, MD, PhD

It is well known adenomyosis causes menstrual pain and heavy menstrual bleeding. In addition, fertility and pregnancy of women with adenomyosis are getting more attention. That is because an increasing number of women with adenomyosis want to have babies along with the trend of late childbirth. Adenomyosis seems to cause infertility while the data are inconsistent. For example, protocols of controlled ovarian hyperstimulation, fresh or frozen-thawed embryo transfer, symptoms associated with adenomyosis, and ultrasonic features of adenomyosis seem to have an influence on the effect of adenomyosis on endometrial receptivity. In terms of molecular mechanisms of poor receptivity of the uterus with adenomyosis, we recently demonstrated that adenomyosis often has gene mutations of KRAS in the endometrial epithelial cells. KRAS mutations decrease the expression of progesterone receptors, which might induce the reduction of receptivity of the endometrium in adenomyosis. We also discovered that STAT3 activation is observed in the endometrial epithelial cells in adenomyosis uterus, but not in normal uterus, during the secretory phase. Since STAT3 activation induces cell proliferation, STAT3 activation might also be involved in the reduced receptivity via impaired cessation of the endometrial epithelial cells. Regarding the treatment of the deteriorated receptivity, GnRH agonist pretreatment followed by thawed embryo transfer is reported to restore the receptivity, probably by improving gene expression of molecules for implantation. There are many complications in pregnancy in women with adenomyosis. Adenomyosis increases the incidence of miscarriage, preeclampsia, and placental malposition. In addition, degeneration of adenomyosis during pregnancy and after delivery sometimes causes intractable consequences, such as infection and fever. Tackling these problems are often painstaking. Adenomyomectomy is a surgery that needs high skills. To overcome infertility or problems during pregnancy, we sometimes conduct adenomyomectomy. However, adenomyomectomy entails an increased risk of uterine rupture. We need to weigh pros and cons prudently and consult expert obstetricians as well as patients before deciding to conduct adenomyomectomy.

# Thomas M. Gellhaus (IS6)



# CURRICULUM VITAE

## Thomas M. Gellhaus, MD

Dr. Thomas Gellhaus is a Professor Emeritus in the Department of Obstetrics and Gynecology at the University of Iowa Carver College of Medicine in Iowa City, Iowa. Dr. Gellhaus received his Bachelor of Arts Degree in Chemistry from Augustana College in Sioux Falls, South Dakota, his Bachelor of Medicine Degree from the University of South Dakota in Vermillion, South Dakota, and his Doctor of Medicine Degree from the University of Oklahoma in Oklahoma City, Oklahoma. Following 3 years of Pathology Residency at the University of South Dakota, he completed his residency in Obstetrics and Gynecology at the University of Iowa Hospitals and Clinics. After residency, he entered private practice in Davenport, Iowa and after 20 years in private practice, he returned to academic medicine at the University of Iowa, Department of Obstetrics and Gynecology as a Clinical Associate Professor. He had been at the University of Iowa for 10+ years and was promoted to Clinical Dr. Gellhaus is the Past President of the American College of Professor in July 2017. Obstetricians and Gynecologists. He has served ACOG and its members for more than 25 years in various positions. Dr. Gellhaus' interests are in the area of mentoring, advocacy and healthcare policy for providers and patients. He has completed the McCain Fellowship, a month long in-depth experience in advocacy, at ACOG in Washington, D.C. in 1999. In 2001, he was a Primary Care Policy Fellow with the U.S. Department of Health and Human He has remained active in advocacy and policy as a member of ACOG' s Services. Government Affairs Committee and the Ob/Gyn PAC. He also founded and endowed the Gellhaus Resident Advocacy Fellowship at ACOG allowing third or fourth year residents to gain further advocacy and health policy experience over a four week resident elective rotation. He has received numerous teaching awards and honorary fellowships around the world. Dr. Gellhaus has also been very active in leading groups on short-term medical and surgical mission projects for the last 20 years. He has done numerous presentations about these short-term medical and surgical mission projects throughout the United States. Dr Gellhaus and his wife, Melanie, recently endowed the newly formed Global Women' s Health Program at the University of Iowa, Department of Obstetrics and Gynecology. Dr Gellhaus is currently the Vice Chair of Health Volunteers Overseas.

# Mentoring Our Next Generation

Thomas M. Gellhaus, MD

Medicine been become incredibly complicated – not only with navigating the world of finance and payors but also with the proliferation and availability of information. Mentoring has never been more important, not only for our younger learners and junior associates but also for each one of us. Learning how to become a great mentor is vital and is more important now than ever.