## Mini-Symposium:

## **Advanced Studies in Implantation Mechanisms**

## **Preface**

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Recent advances in assisted reproductive technologies used to treat infertile couples have shown considerable innovation with regards to preimplantation development; in particular, development of techniques such as IVM, IVF, IVC and ICSI have considerably improved fertilization and embryo production. However, many problems involving implantation *per se* and post-implantation development still need to be addressed. For this reason, the editorial board of JMOR has commissioned this issue, entitled "Mini-symposium of Advanced Studies in Implantation Mechanisms", with the following contributions written by experts on various relevant topics:

Imakawa *et al.* "Molecular mechanisms associated with conceptus-endometrium interactions during the peri-Implantation period in ruminants"

Matsumoto *et al.* "Differential interactions between embryo and uterus during implantation in laboratory animals" Uchida *et al.* "Epigenetic treatment in assisted human embryo implantation"

Fujiwara *et al.* "Immune system cooperatively supports endocrine system-primed embryo implantation" Maruyama "Therapeutic strategies for implantation failure due to endometrial dysfunction"

Azumaguchi et al. "Mechanism underlying the low implantation rate in patients with thin endometrium"

These reviews, covering aspects from both basic scientific and clinical research, are must-read works that will give you a better understanding of "Implantation".