

**Mini-Symposium:  
Culture media for preimplantation development**

## Preface

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The title of this mini-symposium is “Culture media for preimplantation embryo development in assisted reproductive technology”.

Today, many culture media are commercially available. These culture media are higher quality, and are more cost-effective, and easier to use than self-prepared culture media in most cases. Despite culture media being important for preimplantation embryo development, there is a tendency to forget their importance due to their convenience. Therefore, this mini-symposium focuses on the past, the present, and the future of culture media.

Dr. Toyoda and Dr. Yokoyama give an account of hardships of encountered in developing TYH medium for *in vitro* fertilization in the mouse. Dr. Miyoshi wrights about the difficulties of releasi the “two-cell block” of rat embryos in the culture medium. Dr. Yao reviews the past, the present, and the future of human preimplantation embryo culture media, and Dr. Yamada introduces the formulation and influence of culture media on gene expression and the methylation status of preimplantation embryos and discusses the implications for infertility treatment.

I hope that this mini-symposium will stimulate your interest in the next optimized culture media for preimplantation embryo development.