

SELECTED PAPERS
ON
**PLANNED
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VOLUME

26

**Recent Advances in
Andrological Research
Part 1 Basic Research**

男性学研究新进展 上册 基础理论研究

Selected Papers on Planned Parenthood

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Andrological Research**

Part 1

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ARCHIVES OF ANDROLOGY publishes research papers, review articles and short communications in areas of reproduction, fertility and regulation and infertility in the human and animal male. The journal covers specific aspects of andrology, including: • anatomical • morphological • ultrastructural • physiological • genetic • molecular • biochemical • clinical • surgical • pharmacological • endocrinological • immunological • neurological • microbiological • pathological • psychiatric • fertility regulation • contraception.

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前 言

男性学是近年崛起的一门新兴的独立学科,其任务是研究男性的生殖规律,并运用这些规律去发展男性不育症的诊断与治疗技术和探索男性的避孕方法。简言之,它是专门研究男性的生育、不育与节育的科学。男性学涉足的领域十分宽阔,它与生殖生物学、解剖学、组织胚胎学、内分泌学、生化学、病理学、遗传学、分子生物学、细胞生物学、泌尿科学、妇产科学和心理学等基础及临床学科均密切相关,因而它的发展也有赖于多学科的渗透。最近几年来,由于不同专业的学者协力研究,国外男性学的发展十分迅速,反映其研究成果的论文频频出现在各种有关的学术刊物中,男性学的专著、专刊、丛书和国际会议文集亦接二连三地问世,在学术出版园地中占了其应有的一席之地。我国的男性学研究起步较晚,但现已受到有关领导部门和专业研究人员的重视,目前正迎头追赶国际先进水平。为了使我国男性学工作者能较全面地掌握国外男性学研究的进展和动向,我们特围绕精子的发生与成熟、男性生殖的激素调控、获能与受精、男性生殖免疫学等方面检索了近年发表的国外文献,并请有关专家从中筛选出水平较高的论著,集中汇编成这册“选集”。

本书为“男性学研究新进展”的上册,主要反映国外男性学基础理论研究的新成果,兼载有关实验新技术方面的文章。选编者刻意求新,选入了关于催乳素与钙调素的调控、精子膜分子生物学、精子抗原的单克隆抗体、精子抗原的免疫学研究、精-卵识别机理、精子体外穿透试验等新理论与新技术的有关论述,以求较集中地反映国外 80 年代初男性学基础理论研究的新貌,供我国读者参考与借鉴。

鉴于文献量大,涉及面广,本册的选题虽几经审订,仍难免挂一漏万,祈望读者不吝指正。

本书承王一飞、谢文英、朱继业、吴明章等同志共同选编,倪一玄、冯京生、徐文灏等同志参加部份中文摘要的编译工作,特此致谢。

编 者

序

这是论述男性学基础研究的一本专题论文集。本文集第一篇文献是美国 Steinberger 教授所写的“男性学的过去、现在与未来”。回顾过去,为的是正视现在,更重要的是为了迎接未来。男性学是一门出现不过十余年的新兴学科,尽管它的历史并不长,但由于许多不同专业的学者几年来的通力合作和在男性学领域内的辛勤耕耘、发奋开拓,使这门新学科取得了长足的进步。这本论文选集可以作为近年来男性学基础研究的鸟瞰。

基础研究与临床实践从来是相互促进、相辅相承的。男性学是一门实践性很强的应用学科,研究男性的生育,为的是解决男性的不育与节育,深入阐明男性正常生育的规律可为解决男性的不育与节育问题打下坚实的基础。反之,也只有在对男性不育与节育的不断研究中才能为男性生育的基础研究提供新线索、开辟新课题。本书集中了几篇卓越的综述,仔细阅读这些篇章,可对男性生殖生理各领域(精子发生、精子成熟、精子获能与受精)的研究近展获得一个明晰的概念,在此基础上也对男性不育症的诊断、治疗,以及男性节育方法的探索提出一些新的可能途径。这对于广大泌尿科大夫及计划生育科工作者是大有裨益的。当前,优生学也日益受到人们的重视,故本文集特地搜集了一些有关精母细胞减数分裂及人精子染色体制备方法及实验研究的论文,从事生殖生物学研究的遗传学工作者将会对此深感兴趣。

正因为男性学是一门涉及众多学科的新兴科学,它所采用的研究技术是多种多样的。我们在了解国内、外男性学基础理论研究进展的同时,也应当熟悉一些当前采用的新技术及采用这些技术所取得的成果,这对我国的男性学工作者具有重要的参考价值。其中精液的生化检查与精子抗原的免疫学检测并非鲜见,但在我国还只处于探索阶段。至于针对精子抗原的单克隆抗体技术及人精子对去透明带金色田鼠卵穿透试验等技术在我国尚属于空白或雏型阶段,很有必要迎头赶上世界研究的潮流。

除了具有明确的实用意义外,男性学基础研究的本身也正在细胞及分子水平上不断向纵深发展,在可以预见的将来,男性生殖内分泌、精子发生与精子成熟的调控,以及精子获能与受精等方面定会有一系列重大的突破性进展。特别值得提出的是以下几个十分有前途的研究领域:间质细胞机能的局部调控、精子膜的分子生物学、精子抗原的免疫学研究及精子运动的分子机制等。反映这几个领域研究成果的论文也已收入本卷。

借鉴不是目的,而是创造的前奏。我国的男性学研究方兴未艾,广大男性学工作者在吸取国外先进经验的基础上定能为世界男性学的发展作出我们应有的贡献。

王一飞

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