

---

## Preface

Papillomaviruses attract the attention of virologists and doctors alike, perhaps most importantly because human papillomaviruses (HPV) are the etiological agent of cervical cancer, the second most commonly found female cancer worldwide. Historically, research into HPVs has been hampered by the fact that, unlike many other viruses, HPVs show both species and tissue specificity. To overcome this problem, specialized techniques, such as the use of organotypic “raft” cultures to study the HPV lifecycle in human tissue, have been developed. This approach complements the traditional method of histochemistry used on clinical samples and the multitude of molecular methods available for analyzing individual viral protein functions. Despite recent progress on vaccine development, it seems likely that, for the foreseeable future, HPV will remain an important human pathogen. Indeed, fundamental questions regarding both the virus lifecycle and cancer progression remain. It is our hope that *Human Papillomaviruses* will be a useful tool in helping to find the answers.

We have aimed to provide a collection of protocols that will be a useful resource for both basic scientists and clinicians working in the field of papillomavirus research. Although it is impossible to cover all aspects of papillomavirus research, *Human Papillomaviruses* aims to incorporate a broad range of protocols. Some protocols are already well established, whereas others have been developed only in the last few years. The major themes of this book include: the detection and typing of papillomavirus infections, the study of the papillomavirus life cycle, and the production and functional analysis of papillomavirus proteins. This is achieved using a wide variety of techniques, from PCR to propagation of HPV in vitro. Each chapter has been compiled by experts in the field who are well aware of the pitfalls of their experiments. With this in mind, emphasis has been placed on providing methods that go beyond the details provided in typical journal articles. The protocols are intended to be immediately understandable to a novice in the field, and potential problems are highlighted before they can occur.

Of course books like *Human Papillomaviruses* require input from a large number of people and we are indebted to all the authors for giving up their time to produce such excellent contributions. We would like to thank them for their tolerance of our editorial interventions and our persistent pestering for corrections and signatures. Valuable assistance in proofreading was provided by

Mahmood Ayub and other members of the Doorbar lab. We are also very grateful to John Walker at the University of Hertfordshire, and the editorial staff at Humana Press, for all the advice and assistance they have provided.

*Clare Davy*  
*John Doorbar*

Human Papillomaviruses

Methods and Protocols

Davy, C.; Doorbar, J. (Eds.)

2006, XVI, 496 p. 153 illus., Hardcover

ISBN: 978-1-58829-373-2

A product of Humana Press