

FOREWORD

The year 2003 marks the tenth anniversary of the first use of the acronym "Stat" (also written "STAT") in the scientific literature for a family of transcription factors which rapidly transduce cytokine- and growth factor-elicited signals from the plasma membrane to the cell nucleus thereby activating gene transcription (thus, Signal Transducers and Activators of Transcription). From those beginnings, the field of STAT transcription factors, their related regulatory molecules and their biology has grown exponentially in many different directions.

In recognition of the rapid growth and broad scope of the STAT transcription factor field today, and to celebrate the tenth anniversary of the use of this term in the scientific literature, Kluwer Academic Publishers B.V. requested us to compile a volume on STAT transcription factors that could serve as an overview of this burgeoning area. Thus, we wanted a volume that would serve as a reference for what is known about STAT proteins and their biology, would describe the current state of ongoing research in this broad area, and would look toward the future to try to predict the discoveries that lie ahead. Our charge was to seek out the very best experts in the field and to coax them to briefly summarize their areas of expertise. We hope the end result of this endeavor will prove useful to both the novice and the expert in that it will provide within the covers of one book not only a didactic overview of the STAT transcription factor field, but also a summary of past literature, current developments, and new uncharted, perhaps controversial, ideas and questions about STAT activation and biology. In order to preserve the particular style of each contributor and to give the book a unique flavor, we agreed that each chapter could be somewhat slanted in the form of a personal essay and in some cases requested even overlapping contributions from experts with different points of view.

We were pleasantly surprised by the enthusiasm with which this project was received by our colleagues. We are grateful to all of the contributors who have collectively put their best foot forward and helped produce a memorable book. We thank them all. We are sure that your readers will appreciate each and every contribution in this volume.

We dedicate this book to Jim Darnell. Jim has not only contributed enormously to this entire field from its inception through to the present (and we assume will into the future), coined the term STAT along with his wife

Jane, but has also been a mentor, a colleague and a friend to many of the contributors to this volume. PBS and DEL, as Jim's former predoctoral and postdoctoral trainees respectively, owe a particular debt of gratitude for the way that the "Darnell Lab" touched our lives.

We thank Clare Nehammer, our Publishing Editor at Kluwer, who has been instrumental in moving this project forward with efficiency and great speed. We also appreciate the assistance of Esther Verdries at Kluwer who has answered many manuscript handling and style-related questions sent her way by all of us with dispatch and clarity. Moreover, we are grateful for the invaluable assistance of Mehul Shah in collating and compiling this book.

PBS would like to pay special tribute to his friends Elyse S. Goldweber, Josephine Lauriello, Michele Tortorelli and Sansar C. Sharma without whose collective help during critical moments during the last year this project would not have materialized.

We consider it a personal honor to have had the opportunity to compile "The STAT book." We thank our colleagues for their magnificent contributions.

June 12, 2003

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