

Heng Yin · Yuguang Du *Editors*

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# Research Progress in Oligosaccharins

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# Chapter 1

## The Discovery of Oligosaccharins

Peter Albersheim

**Abstract** This chapter is a personal historical account of the events leading to the discovery of oligosaccharins. The discovery was not the result of a eureka-type event but rather lots of well-designed laboratory experiments. In the early days, including most of the time period covered by this chapter, oligosaccharins were called elicitors. The chronology of the chapter ends in 1984, for by that time the biological regulatory properties of structurally defined oligosaccharides were established. The biological activities and structures of two oligosaccharins originating from fungal mycelial wall polysaccharides and two from plant cell wall polysaccharides are described.

**Keywords** Oligogalacturonides • Chitin • Chitosan •  $\beta$ -Glucan • Elicitor and oligosaccharin

### Introduction

I hesitated when invited to write this chapter because it is difficult to write about myself. I decided to accept the offer and to use it to describe events that influenced me to become a scientist and acknowledge a few of the people who were participants in the discovery of oligosaccharins. Teams move bioscience forward most rapidly. The uncovering of oligosaccharins is no exception.

It is now widely known that complex carbohydrates (those with more than one sugar residue) are involved in many if not most biological processes. Thus it is no longer surprising that some oligosaccharides are biologically active; that is, they are regulatory molecules, with the ability to turn on or turn off processes at concentrations as low as nano molar. **Such biologically active oligosaccharides are called oligosaccharins.**

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