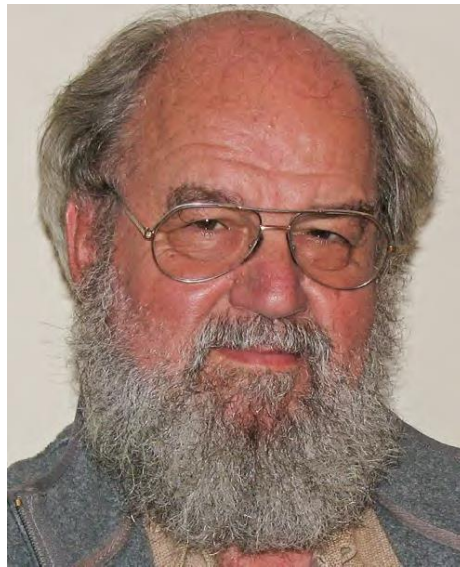
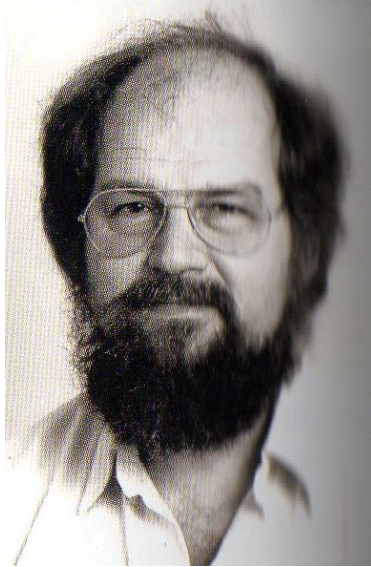


## WAITE ARBORETUM SEAT FACT SHEET: PROF. O. SCHMIDT 1947 – 2011

(Arboretum seats, memorial seats, history features)

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### PROF. OTTO SCHMIDT 1947-2011



Sources: Zeitz, 2014, p.248 (from The University of Adelaide, Urrbrae House Historic Precinct – Coach House Collection) Professor Otto Schmidt (c.1990). Sassan Asgari, 2011, *Society for Invertebrate Pathology Newsletter*, Volume 44, Issue 3, November, p.16

#### 1. NAME - DOB - DOD Professor Otto Schmidt 20 July 1947 – 31 May 2011

- **Occupation:** Biology and chemistry
- **Seat location:** Walk into Elm Tree Avenue from Walter Young Drive, turn right past the 6<sup>th</sup> Elm Tree, keep walking west. The seat is facing east.
- **Nearby tree / plant species:** Left #252 H8 *Cuarina cristata* Belah, CASUARINACEAE N.S.W., QLD 1957 Right #253 HB *Casundrina collina* CASUARINACEAE New Caledonia 1928



Left #252 H8 *Cuarina cristata* Belah, CASUARINACEAE N.S.W., QLD 1957

Right #253 HB *Casundrina collina* CASUARINACEAE New Caledonia 1928



Left #252 H8 *Casuarina cristata* Belah, CASUARINACEAE N.S.W., QLD 1957



Photos: Terry Langham



Photos: Terry Langham **Right** #253 HB *Casuarina collina* CASUARINACEAE New Caledonia 1928

## 2. QUALIFICATION/S

- “As an undergraduate, Otto studied biology and chemistry at the University of Freiburg (1969-74).
- In 1977, he was awarded his Ph.D. from Freiburg, having worked in developmental genetics of the leafhopper *Eusoelis pleb.*
- From 1978-81, he was a postdoctoral fellow in the Department of Molecular Biochemistry and Biophysics at Yale University, New Haven, working in Dieter Söll’s laboratory on gene expression and RNA processing in yeast and *Drosophila* using recombinant DNA technology ...” (Asgari 2011, p.16).

## 3. AREA OF RESEARCH

- “He went on to a position of Assistant Professor in the Department of Genetics at Freiburg (1982-88), and worked on the molecular and genetic control of cell proliferation using *Drosophila* tumor mutations as a model system.
- Having completed his habilitation, in 1989 he went to the Swedish Academy at Stockholm University with a Visiting Scientist Scholarship to work in the field of Microbiology.
- There he began the work on immune recognition and the evolution of immune evasion in insects that continued until his death.
- In 1991, he applied for the position of Professor and Head of Department in what was then the Department of Crop Protection at the **Waite Campus of The University of Adelaide.**
- **He took up this position in 1992, and worked at the Waite until his death this year” ...** (Asgari 2011, p.16).

## 4. RESEARCH SPECIALITY

- “Otto is best known for his discovery of hemolin (an immunoglobulin-like immune protein in insects, published in *Science* in 1990) and its involvement in adhesion, inactivation of microbes and cell-free coagulation reactions (*Annu. Rev. Entomol.* 2008).

- His work on immune suppression in parasitoid-host interactions culminated in a model explaining immune suppression that accounted for most of the systems studied.
- Otto was part of the team which first described virus-like particles (VLPs) in *Venturia canescens* and recognised their role in protecting insect parasitoids from encapsulation by the host hemocytes (Experientia 1986).
- This was followed by several discoveries by his team of the molecular structure of VLPs and immunosuppressive genes expressed by symbiotic polydnaviruses.
- More recently, Otto was investigating the induction and transmission of *Bacillus thuringiensis*-tolerance in insects involving immunity and that the elevated immune status associated with tolerance was transmitted to offspring by a maternal effect ...” (Asgari 2011, p.16).

## 5. FURTHER INFORMATION - SOME WORDS OF HUMOUR, INTERESTING FACTS, ETC

- “Otto was the sort of supervisor and mentor who inspires enthusiasm, love and respect in his students.
- The three words which possibly best describe Otto are enthusiasm, optimism and generosity.
- We honour his lifelong achievements and mentorship in insect immunity and host-parasite interactions ...” (Asgari 2011, p.16).

## 6. PERSONAL INFORMATION

- “Professor Otto Schmidt peacefully died at home in Adelaide, Australia on May 31<sup>st</sup> 2011 after struggling with a brain tumor.
- Prof. Schmidt was born on July 20<sup>th</sup> 1947 Karlsruhe, German ...” (Asgari 2011, p.16).

## 7. PHOTOS:



Source: Zeitz, 2014, p. 249 (from The University of Adelaide, Urrbrae House Historic Precinct – Coach House Collection)  
Professor Otto Schmidt in the centre of Department of Crop Protection, 1993 photo.

## 8. REFERENCES

Sassan Asgari, 2011, *Society for Invertebrate Pathology Newsletter*, Volume 44, Issue 3, November, p.16.

Zeitz, L.D 2014, *The Waite: A social and scientific history of the Waite Agricultural Research Institute*, Barr Smith Press, Adelaide, pp.248 – 249.

