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Título Profesional o Grado Académico (incluya el año de obtención):

**BIOQUÍMICO, UNIVERSIDAD DE CHILE, 1976.**

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Estudios de Postgrado o Especialización (institución donde lo obtuvo y año de obtención):

**DOCTOR EN QUÍMICA, UNIVERSIDAD DE CHILE, 1992**

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**Actividad Actual e Institución en la cual trabaja:**

**PROFESOR TITULAR DE LA UNIVERSIDAD DE CHILE. DEPARTAMENTO DE QUÍMICA, FACULTAD DE CIENCIAS.**

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Reseña de su actividad laboral actual:

Desarrollo actividades académicas de investigación y docencia en el área de la Bioorgánica.

Mi línea de investigación se refiere al estudio de los mecanismos y estrategias químicas utilizados por microorganismos para sintetizar metabolitos secundarios de importancia agronómica, específicamente moléculas que modulan el desarrollo y crecimiento vegetal como las giberelinas. En los últimos años completamos la caracterización molecular de la biosíntesis de estas fitohormonas en distintos hongos del los géneros *Fusarium* y *Sphaceloma*, tanto desde el punto de vista de las

reacciones químicas, como a nivel de los respectivos genes y enzimas. Estamos caracterizando actualmente la biosíntesis de giberelinas en distintas rhizobacterias

**PUBLICACIONES INDEXADAS:**

Studt, L., Troncoso, C., Gong, F., Hedden, P., Toomajian, C., Leslie, J.F., Humpf, H.-U., Rojas, M.C., Tudzynski, B.

Segregation of secondary metabolite biosynthesis in hybrids of *Fusarium fujikuroi* and *Fusarium proliferatum*

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Bömke, C., Rojas, M.C., Gong, F., Hedden, P., Tudzynski, B.

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Characterization of the final two genes of the gibberellin biosynthesis gene cluster of *Gibberella fujikuroi*. des and P450-3 encode GA4 desaturase and the 13-hydroxylase, respectively

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Rojas, M.C., Encinas, M.V., Cardemil, E.  
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Portilla, G., Rojas, M.C., Chayet, L., Cori, O.

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#### **PROYECTOS DE INVESTIGACIÓN :**

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2002 INVESTIGADOR RESPONSABLE. 1020140 MONOOXIGENASAS Y OXIDASAS DE LA SINTESIS DE GIBERELINAS EN EL HONGO GIBBERELLA FUJIKUROI. CARACTERIZACION MOLECULAR DE LAS REACCIONES QUE DEFINEN LOS RASGOS ESTRUCTURALES DE LAS GIBERELINAS BIOACTIVAS.

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