

Palmer Taylor

Palmer Taylor

Scientist, Scholar, Mentor and Dean



Palmer Taylor Laboratory

Est. 1971

Division of Pharmacology
School of Medicine
UCSD



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Cholinesterases

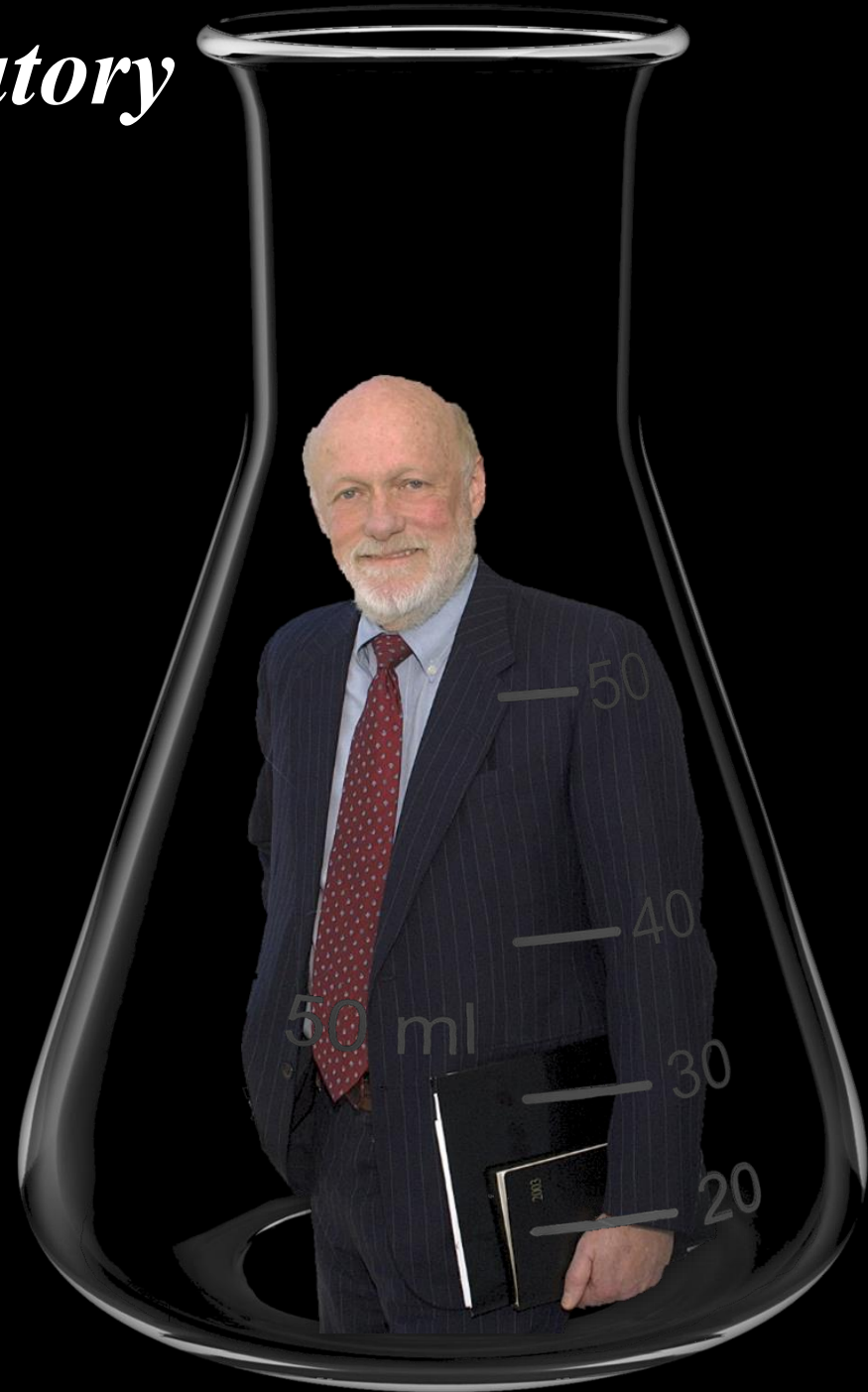
structure/activity

Nicotinic ACh Receptor

structure/function

Neuroligins

structure/function



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Cholinesterases

structure/activity



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Cholinesterases

structure/activity

1973 – AChE peripheral site ligand characterization

S. Camp, M. Bolger, H. Berman, G. Amitai

1986 – AChE primary and secondary structures

M. Schumacher, S. Camp, Y. Maulet, M. Newton

K. MacPhee-Quigley, G. Gibney, S. Taylor

1988 – AChE gene structure and regulation

Y. Li, M. Schumacher, S. Camp, Y. Maulet,

T. Rachinsky, G. Gibney, D. Getman, T. Ekström,

M. Newton, A. Mutero, D. Luo, A. De Jaco

1990 – AChE binding sites and specificity

G. Gibney, D. Vellom, Y. Li, Z. Radić, N. Hosea,

A. Boyd, J. Shi, L. Wong

1995 – AChE tertiary structure

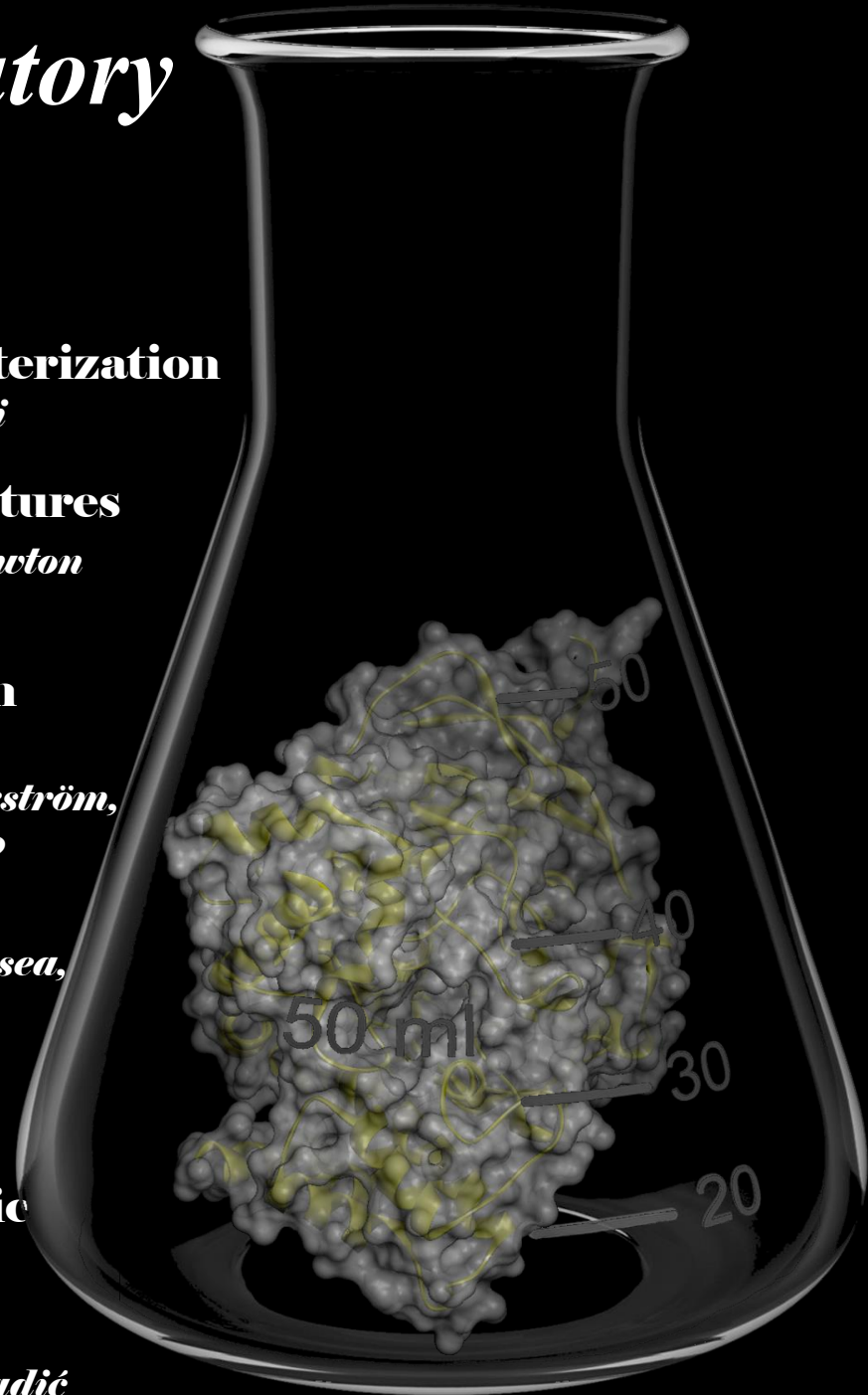
P. Marchot, Y. Bourne

2005 – AChE knock-out and transgenic mic

S. Camp, O. Lockridge, E. Krejci

2011 – Centrally active oxime antidotes

K.B.Sharpless, Z. Kovarik, V. Fokin, Z. Radić



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Nicotinic ACh Receptor

structure/function



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Nicotinic ACh Receptor structure/function

1976 – nAChR kinetics, binding sites characterization

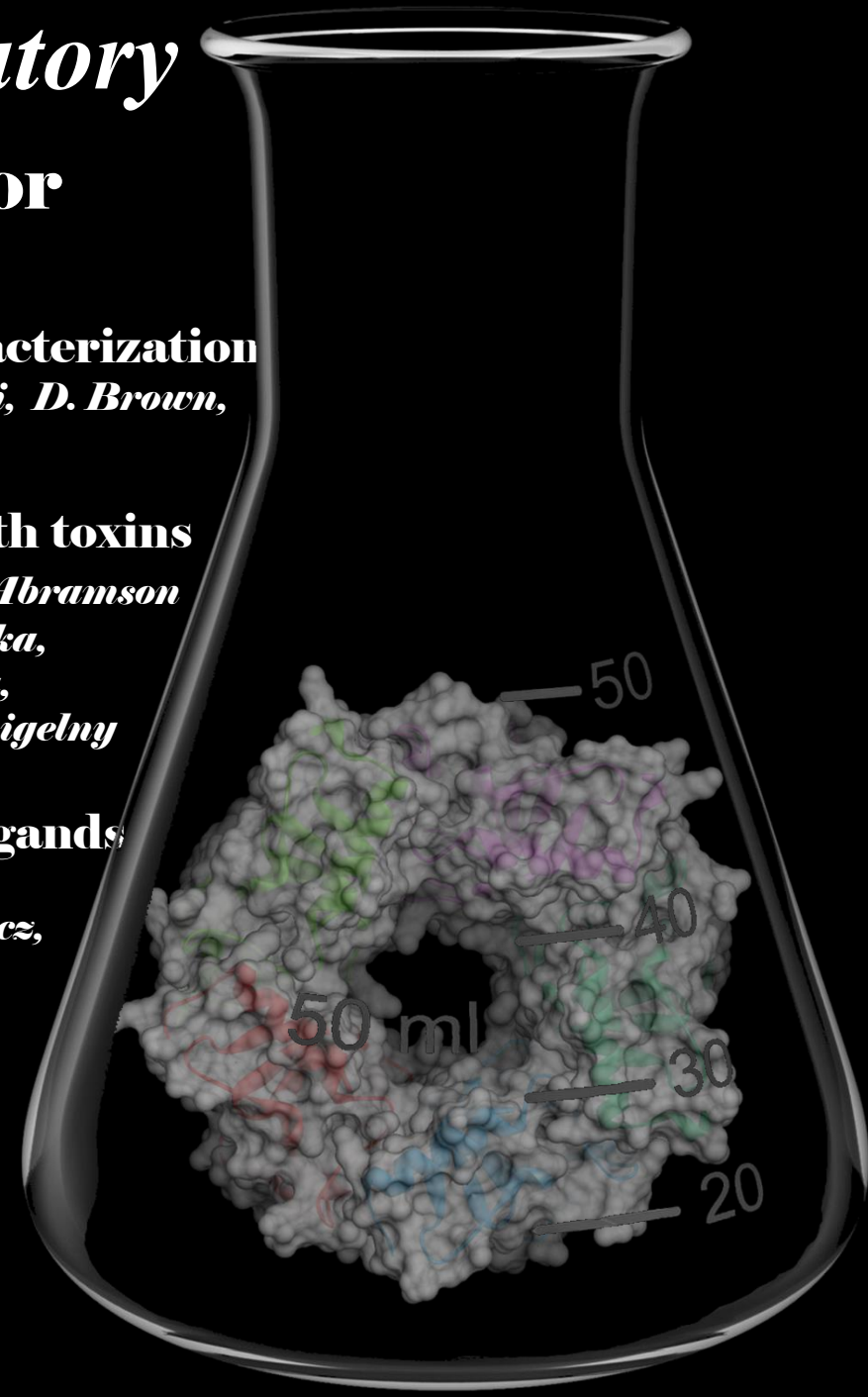
G. Weiland, S. Camp, H. Berman, G. Amitai, D. Brown, K. Ambler

1980 – nAChR specificity : interactions with toxins

*S. Sine, D. Johnson, J. Herz, P. Culver, S. Abramson
H. Kreienkamp, S. Keller, I. Khan, H. Osaka,
C. Kawanishi, N. Sugiyama, H. Hasegawa,
B. Molles, S. Malany, E. Ackermann, I. Tsigelny*

2002 – ACh Binding Protein structures ligands

*S. Hansen, T. Talley, R. Hibbs, Y. Bourne,
P. Marchot, J. Shi, J. Yamauchi, A. Nemecz,
K. Kaczanowska, K. Arunrungrvichian,
M. Harel, J.-P. Changeux*



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Neuroligins

structure/function



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Neuroligins structure/function

2000 – Interactions with Ca^{2+} and neurexin

I. Tsigelny, H. Hasegawa, T. Matsumura, D. Comoletti

2004 – Associations with autism

D. Comoletti, A. De Jaco, L. Jennings, R. Flynn

2004 – Secondary, tertiary, quaternary structures

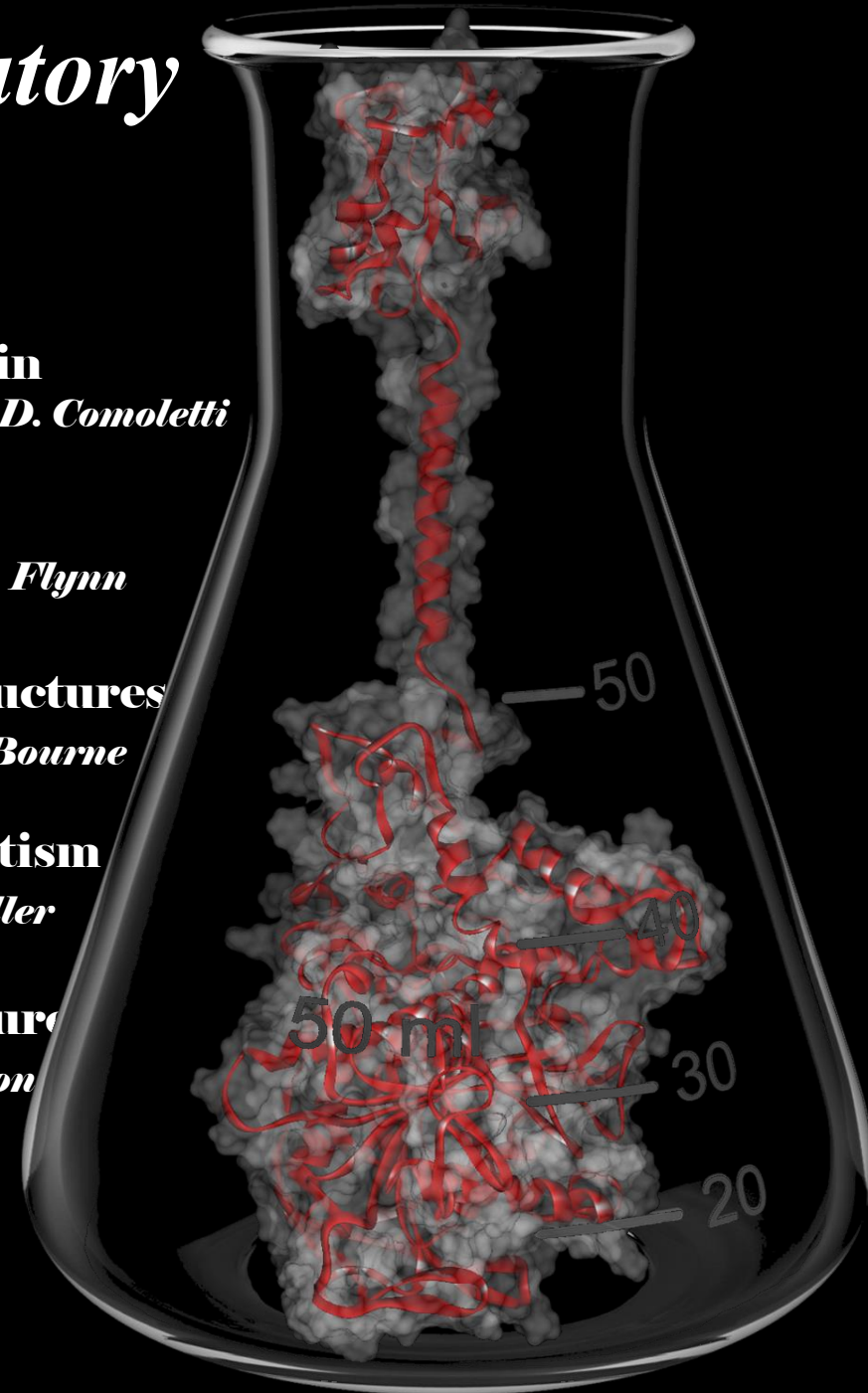
D. Comoletti, L. Jennings, P. Marchot, Y. Bourne

2008 – Protein processing, folding and autism

A. De Jaco, N. Dubi, D. Comoletti, M. Miller

2012 – Neurexin, tertiary and quat. structure

M. Miller, D. Comoletti, M. Harel, J. Wilson



some of sabbatical visitors to the Taylor Lab



Dr. B.P. Doctor
WRAIR



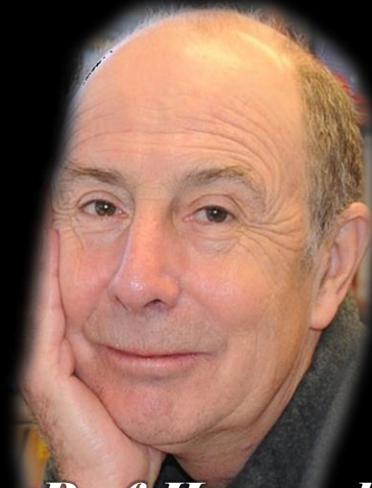
Prof. Quinn
Iowa



Prof. Changeux
Pasteur



Prof. Voet
Swarthmore



Prof. Hammock
UC Davis



Dr. Ashani
Weizmann



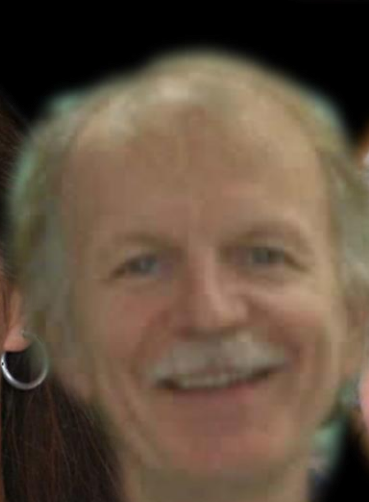
Prof. Franca
Rio



Prof. Pezzementi
Birmingham



Dr. Marchot
Marseilles



Prof. McArdle
Rutgers



Dr. Harel
Weizmann





In particular the French connection has been strong ...

*Indeed, 6 years of annual collaborative exchanges
between Jean Pierre Changeux and Palmer Taylor
resulted in Dr. Taylor being awarded
France's highest honor,*

the Legion of Honor





Legion of Honor Ceremony, 2014

The 6th International Meeting on Cholinesterases Palmer Taylor organized in 1998 in La Jolla



*Leadership at UCSD:
from Division of Pharmacology
to
School of Pharmacy*

1971 – Assistant Professor, Division of Pharmacology

1979 – Head, Division of Pharmacology

1987 – Founding Chair, Department of Pharmacology

2002 – Founding Dean, Skaggs School of Pharmacy