**LYNNE D. TALLEY** Updated January 24, 2012

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## (a) Professional preparation

| | | |
|---|---|---|
| Oberlin College | Physics | B.A. 1976 |
| MIT/WHOI Joint Program in Oceanography | Physical Oceanography | Ph.D. 1982 |
| Oregon State University | Postdoctoral Research Associate | 1982-1983 |

## (b) Appointments

1991-present: Professor, Scripps Institution of Oceanography, UCSD, La Jolla, CA
1988-1991: Associate Professor, Scripps Institution of Oceanography, La Jolla, CA
1985-1988: Assistant Professor, Scripps Institution of Oceanography, La Jolla, CA
1984-1985: Assistant Research Oceanographer, Scripps Inst. of Oceanography, La Jolla, CA

## (c) Publications

### 5 most related to proposed project

Dong, S., S. Gille, J. Sprintall and L. Talley, 2008. Southern Ocean mixed-layer depth from Argo float profiles. J. Geophys. Res., 113, C06013, http://dx.doi.org/10.1029/2006JC004051.

Hartin, C.A., R. A. Fine, B. M. Sloyan, L. D. Talley, T. K. Chereskin, J. Happell, 2011. Formation rates of Subantarctic Mode Water and Antarctic Intermediate Water within the South Pacific. Deep-Sea Res. I, 58, 524-534 http://dx.doi.org/10.1016/j.dsr.2011.02.010

Holte, J. and L. Talley, 2009. A new algorithm for finding mixed layer depths with applications to Argo data and Subantarctic Mode Water formation. J. Atm. Oceanic Tech., 26, 1920-1939, http://dx.doi.org/10.1175/2009JTECHO543.1.

Talley, L. D., J. L. Reid and P. E. Robbins, 2003. Data-based meridional overturning streamfunctions for the global ocean. J. Climate, 16, 3213-3226, http://dx.doi.org/10.1175/1520-0442(2003)016<3213:DMOSFT>2.0.CO;2

Talley, L. D., 2008. Freshwater transport estimates and the global overturning circulation: shallow, deep and throughflow components. Progress in Oceanography, 78, 257-303, http://dx.doi.org/10.1016/j.pocean.2008.05.001.

### 5 other publications:

Hanawa, K. and L. D. Talley, 2001. Mode Waters. Ocean Circulation and Climate, G. Siedler and J. Church, editors, International Geophysics Series, Academic Press, 373-386.

Sloyan, B., L. D. Talley, T. Chereskin, R. Fine and J. Holte, 2010. Antarctic Intermediate water and Subantarctic Mode water formation in the southeast Pacific: the role of turbulent mixing. J. Phys. Oceanogr., 40, 1558-1574. http://dx.doi.org/10.1175/2010JPO4114.1

Talley, L.D., 1996. Antarctic Intermediate Water in the South Atlantic. The South Atlantic: Present and Past Circulation, ed. G. Wefer, W.H. Berger, G. Siedler and D. Webb, Springer-Verlag, 219-238.

Talley, L. D., 2003. Shallow, intermediate and deep overturning components of the global heat budget. J. Phys. Oceanogr., 33, 530-560, http://dx.doi.org/10.1175/1520-0485(2003)033<0530:SIADOC>2.0.CO;2

Talley, L.D., G. L. Pickard, W. J. Emery and J. H. Swift, 2011. Descriptive Physical Oceanography: An Introduction (Sixth Edition), Elsevier, Boston, 560 pp.

**(d) CURRENT AND RECENT SYNERGISTIC ACTIVITIES AND SERVICE:**

- Member, Committee on the Future Science Opportunities in the Antarctic and Southern Ocean (Polar Research Board of the NRC);
- Member, US CLIVAR high latitude flux working group;
- Co-chair Repeat Hydrography Oversight Committee (US CLIVAR and US CO2 program);
- Member, GO-SHIP oversight committee (IOCCP, international CLIVAR); a lead author for Ocean Observations chapter of the Intergovernmental Panel for Climate Change Fourth and Fifth Assessment Report

**(e) COLLABORATORS (PAST 48 MONTHS):**

B. Barnier, (U. Grenoble); N. Bindoff, (U. Tasmania); E. Brambilla, (U. Montpelier); I. Cerovecki, (SIO); T. Chereskin, (SIO/UCSD); M. Cronin, (NOAA/PMEL); X. Davis, (WHOI); S. Doney, (WHOI); S. Dong, (NOAA/AOML); W. Emery, (U. Colorado); R. Feely, (NOAA/PMEL); R. Fine, (RSMAS/U. Miami); D. Fratantoni, (WHOI); S. Gille, (SIO/UCSD); K. Hanawa, (Tohoku U).; J. Holte, (WHOI); G. Johnson, (NOAA/PMEL); T. Joyce, (WHOI); Y.-O. Kwon, (WHOI); S. Lozier, (Duke); A. Macdonald, (WHOI); J. Marshall, (MIT); G. Maze, (IFREMER); J. McClean, (SIO); S. Mecking, (U. Washington); Eitarou Oka, (JAMSTEC); J. Palter, (Princeton U.); J.-J. Park, (WHOI); J. Reid, (SIO/UCSD); M. Rhein, (U. Bremen); S. Rintoul, (CSIRO); S. Riser, (U. Washington); C. Sabine, (NOAA/PMEL); A. Shcherbina, (U. Washington), Y. Shimizu, (Tohoku Fisheries); B. Sloyan, (CSIRO); J. Sprintall, (SIO/UCSD); F. Straneo, (WHOI); T. Suga, (Tohoku University); J. Swift, (SIO/UCSD); J. Toole, (WHOI); S. Wijffels, (CSIRO); J. Willebrand, (U. Hamburg-retired)

**GRADUATE AND POSTDOCTORAL ADVISORS:** Michael McCartney, (WHOI) (graduate)**,** Joseph Pedlosky, (WHOI) (graduate)**,** Roland deSzoeke, (Oregon State University) (postdoc)

**THESIS ADVISOR TO (TOTAL=8; Current students=3):**
Frederick Bingham (U. North Carolina, Wilmington), Xiaojun Yuan (Lamont-Doherty Earth Observatory, Columbia U.), Andrey Shcherbina (U. Washington APL), Elena Brambilla (U. Montpelier, France), James Holte (Woods Hole Oceanographic Institution, postdoc), Caitlin Whalen (current), Samuel Billheimer (current), Andrew Delman (current)

**POST-GRADUATE SCHOLAR SPONSOR, TOTAL=9, LAST 5 YEARS:**
Y. Shimizu (Tohoku National Fisheries, Japan), I. Cerovecki (SIO), M. Mazloff (SIO), E. Oka (JAMSTEC, Japan)