



Undergraduate Internship Mentor Agreement *(Please sign and Return)*

The IRIS Internship program is designed to provide undergraduate students with exposure to many of the broader aspects of the geosciences, and research opportunities within the full spectrum of seismological specialties. The intention of these learning experiences is to encourage, support, and develop students, representing a more diverse population, as they pursue careers in Earth science. As a mentor, you play an extremely critical role in the process. In the broadest sense “*a mentor is someone who takes a special interest in helping another person develop into a successful professional.*” Thus, a mentor is a coach, leader, advisor, counselor, instructor, guide, and friend... but none of these alone or completely.

I, NAME HERE, **acknowledge** that this internship will be an academic learning experience and a personal growth experience for my intern.

I **agree** to support my intern's progress/development throughout the summer by

- meeting with my intern at least once per week,
- communicating and using the goals below to structure the summer's research (with revision as necessary),
- providing learning assistance and supervision to my intern as they conduct seismological research,
- sharing my wisdom, experience and expertise with my mentee,
- learning about my mentees independent goals for the summer and being flexible to provide the necessary support and advice to help my mentee succeed,
- administering the **IRIS Mentoring Rubric** (Appendix A) during the first week, middle week, and final week of their summer placement.

To ensure that my intern gains experience, skill and achieves a final result for presentation at a scientific conference, I **have set forth** following goals for my intern's research experience.

1st third of the internship:

*1) Complete computer (unix, GMT, matlab) tutorials as needed *2) Complete download of Year 1 Cascadia dataset to local computers *3) Complete test of analysis steps on New Mexico sample dataset

2nd third of the internship:

*1) Complete literature review for tectonic setting, subduction zone seismicity, detection methodology – intern presents summary during lunch brown-bag *2) Develop template events for Cascadia repeating earthquakes *3) Begin scanning of data from land stations

3rd third of the internship:

*1) Complete land-station data scanning *2) Begin/complete OBS data scanning *3) Develop

AGU abstract (several rounds of editing/review by me before submission) 4) Develop timeline for completion of figures for AGU presentation 5) Develop “action plan” for student to explore graduate program opportunities 6) Develop plan for earthquake location (if student wants to expand project) Note that there are more goals in the final 3rd, but several of these will be developed during computer “scanning time” when intern will not need to be focused solely on the data analysis.

I **expect** that when the intern arrives at my institution that the intern will have read the following;

- 1) Williams, M.C., A.M. Trehu, and J. Braunmiller, Seismicity at the Cascadia plate boundary beneath the Oregon continental shelf, Bull. Seismo. Soc. Am., 101, 940-950, 2011.
- 2) Boyarko, D.C. & Brudzinski, M.R., Spatial and temporal patterns of nonvolcanic tremor along the southern Cascadia subduction zone, J. Geophys. Res., 115, B00A22, 2010.
- 3) Maceira, M., C. Rowe, G. Beroza and D. Anderson, Identification of low-frequency earthquakes in non-volcanic tremor using the subspace detector method, Geophys. Res. Lett., 37, L06303, doi:10.1029/2009GL041876, 2010.

Finally, at the conclusion of the program, I **agree** to complete and return the host evaluation form that will be sent to me about a month after the conclusion of the program.

Internship Host

Date