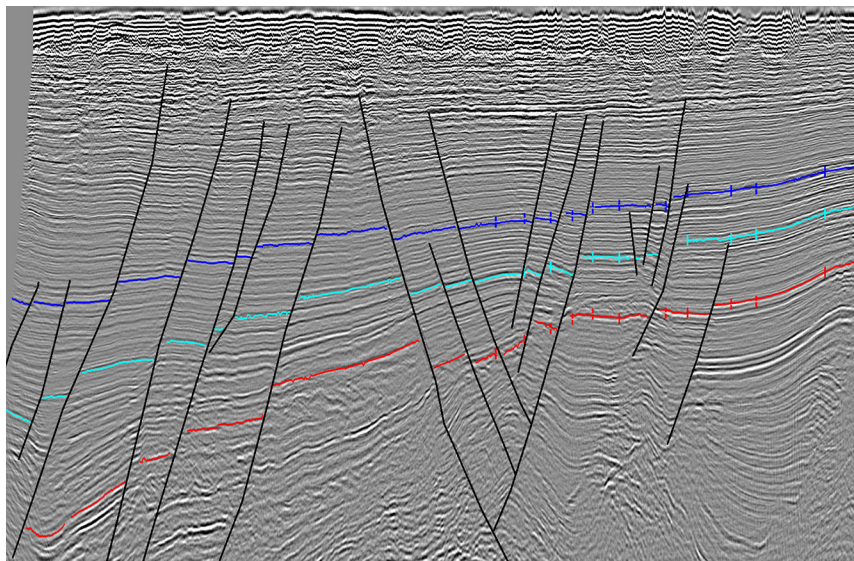


# Gulf Coast Carbon Center

## Mission

The Gulf Coast Carbon Center (GCCC) conducts research and outreach in geologic storage technologies used to reduce emissions of carbon dioxide. Carbon dioxide produced by combustion of fossil fuels and from other industrial processes is captured and injected into porous rocks at locations where it is stored.



Interpreted seismic to identify storage prospects in offshore Gulf of Mexico.

## Research Thrusts

### Large-volume CO<sub>2</sub> Storage

- ◆ Improve structural and stratigraphic characterization methods and simulation approaches to identify suitable locations and increase confidence in the technologies.
- ◆ Create workflows for characterization at basin scale that prepare multiple sites to be operated at maximum injection rates and over prolonged time periods.
- ◆ Assess storage resources in offshore subsea settings in Gulf of Mexico and globally.

### CO<sub>2</sub> Accounting

- ◆ Build confidence in confirming that CO<sub>2</sub> storage is in a well-selected and well-operated site by inventorying possible mechanisms of loss from storage, then documenting via targeted monitoring that no loss has occurred.
- ◆ Increase skills in targeting monitoring by observations of analogs such as hydrocarbons where leakage has occurred and designing physical and numerical experiments to explain migration mechanism, rate, and process.
- ◆ Develop effective monitoring strategies and tools under different settings, different risk-tolerance conditions, and different regulatory environments.

### CO<sub>2</sub>-EOR

- ◆ Assess the best methods and economic value of use of CO<sub>2</sub> for enhanced oil recovery (EOR) in various traditional and novel settings.
- ◆ Intersect the economic value with the storage value. Develop a transparent life cycle, accounting for storage and EOR.



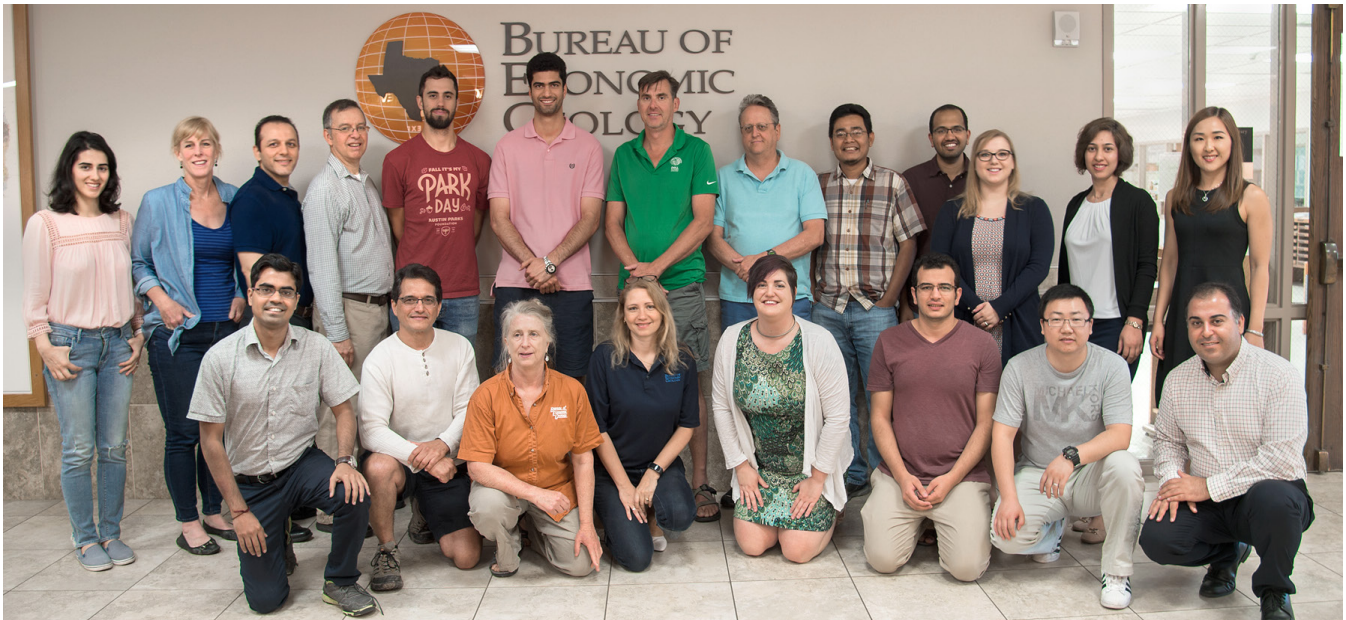
Katherine Romanak collecting soil gas data globally.

## Gulf Coast Carbon Center

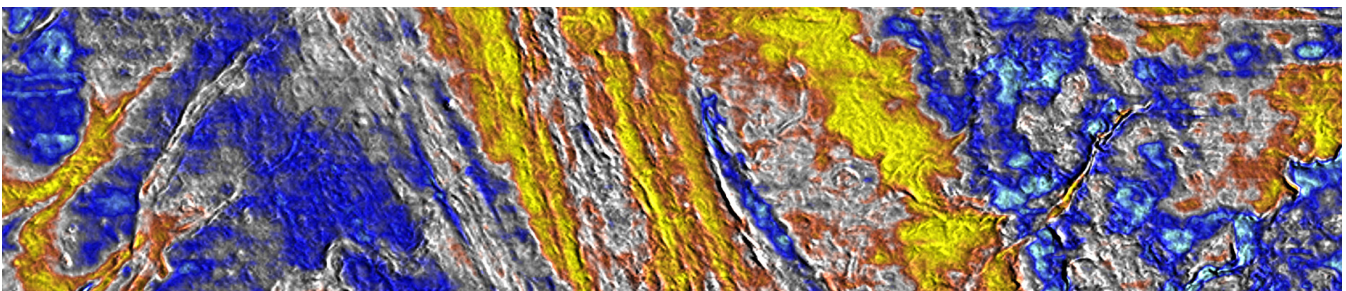
### Research Challenges

---

CCS deployment is not happening at the rate and scale needed to achieve emissions-reduction goals. Many influential stakeholders, from industrial investors to policymakers to journalists, do not have the information needed to see the critical role of CCS in attaining these goals and the viability of CCS.



GCCC staff experience leads to trained CCS workforce.



High resolution seismic slice collected in shallow water allows improved above-zone monitoring design.

### Membership

---

Members meet twice a year (sometimes jointly with other related groups), and they receive a quarterly newsletter.

### Contact

Dr. Susan D. Hovorka, [susan.hovorka@beg.utexas.edu](mailto:susan.hovorka@beg.utexas.edu), (U.S.) 512-471-4863

[www.gulfcoastcarbon.org](http://www.gulfcoastcarbon.org)      [www.storeco2now.com](http://www.storeco2now.com)

[www.beg.utexas.edu/gccc](http://www.beg.utexas.edu/gccc)