

# Illini Science Policy Fellowship 2020 Projects

## **Legislative branch**

[Senator Omar Aquino and the Illinois Legislative Latino Caucus](#)

[Representative Camille Lilly and the Illinois Legislative Black Caucus](#)

## **Executive branch**

[Illinois Department of Innovation and Technology, Education Group](#)

[Illinois Department of Agriculture, Bureau of Meat and Poultry Inspection](#)

[Illinois Department of Commerce and Economic Opportunity, Office of Broadband](#) (2 positions)

Illinois Department of Natural Resources, Office of Resource Conservation (2 positions: [climate adaptation](#) or [hunter mentoring](#))

**Host: Office of Senator Omar Aquino and the Illinois Legislative Latino Caucus**

**Location:** 2511 W. Division St., Chicago, IL 60622

**Fellowship Supervisor:** Layla P. Suleiman Gonzalez, Executive Director of the IL Legislative Latino Caucus

**Position Description:**

This is a joint position hosted between Illinois Senator Omar Aquino and the Illinois Legislative Latino Caucus. The Fellow will contribute to issue research, partner and event coordination, and constituent engagement on public policy priorities.

Sen. Aquino was born and raised on the Northwest Side of Chicago, and is devoted to improving education, aging services and human services. His committee assignments are: Appropriations I (Vice-Chairperson); Appropriations II; Committee of the Whole; Education; Government Accountability/Pensions; Higher Education; Licensed Activities; Subcommittee on Capital (AP); Subcommittee on Charter Schools; Labor (Chairperson); Opioid Crisis Abatement Spec. Com.

The Illinois Legislative Latino Caucus was established in 2002 with three important goals:

- To empower Illinois Latinos and increase access to federal, state and community programs in critically important areas;
- To provide college scholarships for young Latino men and women who need assistance to further their education; and
- To support research and the widespread distribution of policy reports through the Illinois Latino Public Policy Institute.

The Fellow will make significant contributions to research, coordination, and outreach towards these public policy priorities for the 2020-2021 Fiscal Year, including:

- Help promote, organize and staff legislative events, such as annual meetings, government events, letter writing campaigns, in-district meetings, and foundation fundraisers.
- Attend committee hearings held by the state legislature, help with press conferences, and take video and photos at events.
- Research legislative issues for members of the General Assembly or for upcoming articles.
- Create and upload content for social media networking sites and websites.
- Help develop and oversee the relationships with members and advocacy groups.
- Help create a plan to effectively engage constituents.
- Administrative duties such as answering phones, filing and assisting with mailings.

This Illini Science Policy Fellow position receives partial support through PepsiCo. The Fellow will have the opportunity to attend panels, briefings and events supported by PepsiCo. They will also have the opportunity to engage with PepsiCo's corporate leadership and Employees Resource Groups, which are aimed at sustaining a culture of inclusion and diversity to achieve the company's mission.

**Host: Office of Representative Camille Lilly and the Illinois Legislative Black Caucus**

**Location:** 6937 W. North Ave., Oak Park, IL 60302

**Fellowship Supervisor:** Rep. Camille Lilly, State Rep and Chair of the IL Legislative Black Caucus

**Position Description:**

This is a joint position hosted between Illinois Representative Camille Lilly and the Illinois Legislative Black Caucus. The Fellow will contribute to issue research, partner and event coordination, and constituent engagement on public policy priorities.

Rep. Lilly is a lifelong resident of Chicago's Greater West Side. As chairwoman of the Illinois Legislative Black Caucus, her focus is to ensure members are advocating on behalf of the community, to ensure inclusion and diversity which results in the expansion of growth in the African-American community. Her committee assignments are: Financial Institutions (Chairperson); Museums, Arts, & Cultural Enhancement (Chairperson); Appropriations-Human Services; Appropriations-Public Safety (Vice-Chairperson); Insurance; Special Subcommittee (FIN) (Sub-Chairperson).

The mission of the Illinois Legislative Black Caucus is to assure that the interest of African-American citizens are given equitable representation in the General Assembly Areas of housing, health & welfare, education, employment and minority business enterprise.

The Fellow will make significant contributions to research, coordination, and outreach towards these public policy priorities for the 2020-2021 Fiscal Year, including:

- Help promote, organize and staff legislative events, such as annual meetings, government events, letter writing campaigns, in-district meetings, and foundation fundraisers.
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**Host: Illinois Department of Innovation and Technology, Education Group**

**Location:** 120 West Jefferson, Springfield, IL

**Fellowship Supervisor:** Mary Reynolds, Education Group Chief Innovation Officer

**Position Description:**

DoIT's mission is to empower the State of Illinois through high-value, customer-centric technology by delivering best-in-class innovation to client agencies fostering collaboration and empowering employees to provide better services to residents, businesses, and visitors. The Department of Innovation & Technology (DoIT) became an agency by statute on July 20, 2018 being charged with responsibility for the information technology functions of agencies under the jurisdiction of the governor.

DoIT is leading a digital transformation toward an enterprise approach to technology at the State of Illinois to gain efficiencies and improve service delivery for customer agencies who, in turn, serve the residents of Illinois. This transformation is resulting in improved security and data protection, fewer redundant systems, more efficient technology spending and greater interagency collaboration.

DoIT delivers statewide technology, innovation and telecommunication services to state government agencies, boards and commissions as well as policy and standards development, lifecycle investment planning, enterprise solutions and privacy and security management.

DoIT manages the Illinois Century Network (ICN), a service that creates and maintains high speed telecommunications networks providing reliable communication links to and among Illinois schools, institutions of higher education, libraries, museums, research institutions, state agencies, units of local government and other entities that provide service to Illinois residents.

Goals and objectives for DoIT Illini Science Policy Fellow:

- Fellow will provide professional contributions to inform research, policy, and management of issues within the Illinois Department of Innovation and Technology related to Science, Technology, Engineering and Math (STEM) initiatives.
- Help guide development of STEM policies for the State of Illinois.
- Collaborate with other state agencies and organizations to promote STEM activities statewide and coordinate opportunities.
- Assist in development and maintenance of web resources related to STEM.
- Assist in gathering resources and developing model STEM curriculum and activities for K-12 educators Audience will also include students, parents, and youth organizations such as 4-H.
- Share employment opportunities in STEM fields through potential development of improved pathways into government.

Mentorship and Engagement @ DoIT

DoIT intends to help guide the development and awareness of STEM educational opportunities throughout Illinois through collaborative work with state agencies, K-12 schools, advocacy organizations, colleges and universities, business, and industry. This engagement work aligns closely with the Illinois Extension projects related to STEM 4-H youth development and will require coordination with Extension STEM Specialists. Development of expanded STEM resources will cultivate opportunities through the U of I's public outreach and engagement network to expand educational programs throughout the state.

The fellow will be engaged directly with projects related to education technology coordination• efforts and those initiatives specifically related to STEM fields that integrate all five Extension critical issue areas. Active engagement with anticipated initiatives include a STEM event at the Illinois State Fair, coordination of online STEM resources and activities for multiple audiences, and expansion of STEM opportunities for youth throughout Illinois. Professional growth opportunities will enable the fellow to actively engage in public policy development, collaborate with a variety of advocacy organizations, focus on creative resource development, and explore innovative ways to communicate activities.

**Host: Illinois Department of Agriculture, Bureau of Meat and Poultry Inspection**

**Location:** John R. Block Building 801 E. Sangamon Ave. Springfield, IL 62702

**Fellowship Supervisor:** John M. O'Keefe DVM, Assistant Bureau Chief, Bureau of Meat and Poultry Inspection

**Position Description:**

The Bureau of Meat and Poultry Inspection is responsible for the administration of the State of Illinois Meat and Poultry Inspection Act which protects the consumer in relation to wholesomeness, deceptive advertising and proper labeling of meat and poultry products. The inspection program complies with United States Department of Agriculture Federal Meat Inspection Act and Federal Poultry Inspection Act.

Inspection coverage includes all aspects of intrastate slaughter and processing from antemortem and postmortem inspection during slaughter operations and processing and to the retail level. In the previous fiscal year the Bureau provided slaughter and/or processing inspections for 160 establishments. The Bureau also licenses and inspects around 750 Meat and Poultry Brokers and 53 refrigerated warehouses.

Bureau Meat and Poultry Inspectors have various tasks and requirements at each establishment location depending on the establishment activities and end product. Most inspectors make several stops each day and must allot time for travel, observation, review of establishment documents, communications and documentation.

**Goal:** Conduct a workload and time study to assist the Bureau of Meat and Poultry Inspection identify adequate staffing needs addressing efficiencies and areas for improvement.

**Workload and Time Study:**

1. Visit establishments and monitor inspection activity to gain an understanding of the time it takes to do different daily work (e.g., monitoring, documenting, email review for critical information).
2. Identification of efficiencies to be shared as "best practices."
3. Identification of barriers to time management.
4. Identification of deficiencies in knowledge leading to training opportunities.

The identified fellow will be included in a variety of elements of the Bureau, including education, investigation, system evaluations, antemortem and postmortem exams in slaughter establishments, inspection in processing establishments, and evaluation of compliance with regulations pertaining to the humane handling and slaughter of livestock. Individual will gain familiarity with state and federal statutes, rules and regulations for meat and poultry inspection.

The fellow will work directly with inspectors, inspector supervisors, Veterinary Consumer Safety Officers (USDA Veterinarians), Bureau Chief (DVM) and Division Manager (State Veterinarian). There will also be an opportunity to interact with establishment management.

**Host: Illinois Department of Commerce and Economic Opportunity, Office of Broadband**

**Location:** 100 W Randolph Street, Chicago, IL *or* 500 E Monroe Street, Springfield, IL

**Fellowship Supervisor:** Matt Schmit, Director, Illinois Office of Broadband

**Position Description: \*\*2 positions available\*\***

As a primary charge, the Illinois Office of Broadband is responsible for administering the \$400 million Connect Illinois broadband infrastructure grant program – the country's largest state-based competitive matching grant fund. In addition, the Office is developing related programming – such as in the areas of community planning and capacity building and digital literacy, adoption, and inclusion. A fellow would be invited to participate in each of these areas, particularly with regard to grant administration, community engagement, and program planning and execution.

The Office serves as a resource to the Illinois Broadband Advisory Council, which has contributed to development of a state broadband strategic plan articulating the Connect Illinois vision, strategy, and approach. This council has formed several working groups focused on broadband access, technology and infrastructure, economic development, education, and telehealth – and future work may expand to such areas as precision agriculture, smart city deployment, and business incubator development. A fellow would be invited to contribute to the work of the Broadband Advisory Council, including the opportunity to develop some degree of policy expertise in one or more of the subject areas listed above per the fellow's academic interests and/or professional goals. This work could include contribution to the council's annual report to the General Assembly or related intermediate deliverables, as well as direct interface with various state agencies, private businesses, and/or nonprofit public policy organizations.

Beyond the administration of grants and programming, the Office is working with private vendors to develop state-specific mapping of broadband assets, including available technology and levels of service. This effort will leverage otherwise proprietary broadband provider data – and direct consumer crowd-sourced data – to generate interactive mapping detailing the technology and levels of service available to communities and consumers throughout Illinois. A fellow would be invited to work with the mapping vendor(s) to facilitate incorporation of the related maps and data sets into the Connect Illinois website, related programming, and community engagement. This work could include innovative work merging broadband provider data with crowd-sourced user data to create a standard for accurate state-based broadband mapping.

Finally, the Office of Broadband will serve as a one-stop shop for all things broadband. From infrastructure to utilization, public funding to private deployment, the Office will strive to be a useful resource to individual consumers, local communities, various state agencies, and broadband providers alike. Just as broadband connects seemingly distinct aspects of our lives or otherwise siloed areas of government, the Office of broadband seeks to make meaningful connections – including through thoughtful public-private partnership, innovative cross-sector collaboration, and increased efficiency within state agency and across all levels of government. A fellow would be invited to play a critical, versatile, and flexible role in a relatively new Office that aspires to set the standard for state-based broadband investment and programming. The sheer magnitude of the \$400 million Connect Illinois grant program combined with the opportunity for progressive policy and programming positions the Illinois Office of Broadband to realize this vision – but first we need to round out our team with one or more curious and hardworking Illini Science Policy Fellows. The Illinois Office of Broadband has staff in Chicago and Springfield; a fellow would have the choice of working from either location or splitting time between the two.

**Host: Illinois Department of Natural Resources, Office of Resource Conservation**

**Location:** One Natural Resources Way, Springfield, IL 62702

**Fellowship Supervisor:** Chris Young, Director, Office of Resource Conservation

**Position Description:**

Mission Statement

The mission of the Illinois Department of Natural Resources is to manage, conserve and protect Illinois' natural, recreational and cultural resources, further the public's understanding and appreciation of those resources, and promote the education, science and public safety of Illinois' natural resources for present and future generations.

Project

The Illinois Department of Natural Resources (IDNR) is working with the Governor's Office to help the State of Illinois honor its commitment to the U.S. Climate Alliance to lower greenhouse gas emissions and reduce its carbon footprint. The Department is engaged in several projects related to climate change. To be successful, the Department needs an accurate gauge of carbon storage and sequestration potential on Department owned, leased and managed lands. As a result of this effort, the Department will be able to report information to the public that is accurate and defensible.

Position Responsibilities

The position is critical to helping the Department of Natural Resources meet its goals for lowering greenhouse gas emissions, for reducing its carbon footprint, and to provide additional carbon storage and sequestration.

The fellow will conduct a comprehensive literature review to determine what updated methods are available for measuring carbon storage and sequestration of Department lands. The literature review also should take into accounts methods used by surrounding states.

The fellow will work with the Department of Forest Resources mentor to develop an outreach plan to communicate Department efforts to decision-makers and the public. The fellow also may interface with the Department's private lands conservation programs. The fellow also may work with the Office of Land Management on its regenerative agriculture efforts of state lands leased for agriculture. Determining best practices for storing carbon on working lands will be critical to helping the Department meet its goals and communicate its results.

The fellow will represent the Department on monthly calls with the U.S. Climate Alliance working lands group. Opportunities for collaboration with other states, grant opportunities and other topics are discussed. The fellow may write grant applications to support the Department's climate change efforts.

Additional Background on IDNR Climate Efforts

Shortly after taking office in Jan. 2019, Gov. JB Pritzker signed an executive order committing Illinois to participation in the U.S. Climate Alliance. That commitment includes implementing policies that advance the goals of the Paris Agreement, aiming to reduce greenhouse gas emissions by at least 26-28 percent below 2005 levels by 2025.

The Department proposes to focus its efforts in these principle areas.



1. Reduce the Department's carbon footprint (set an example for the rest of State Government).
2. Promote sustainable agricultural practices on its properties leased for farming to improve soil health and carbon storage.
3. Protect the State's natural heritage and safeguard the economic value of ecosystem services.
4. Rethink Agency Business Practices and Culture. Create resilient and reliable government processes.

#### Where we stand

- Illinois already has achieved an emissions rate 16.7 percent below 2005 levels, partially due to the retirement of coal-fired power plants (Illinois EPA). IDNR's goal is to offset 50-75 percent of the agency's energy use by 2025.
- The agency has contracted with the Smart Energy Design Assistance Center (SEDAC) at the University of Illinois to guide this effort. SEDAC is assessing Department energy use to develop a greenhouse gas emissions baseline.
- Preliminary analysis by SEDAC concluded the IDNR could offset its electrical use with approximately 40-60 acres of solar development (approximately the space occupied by the infield of the Illinois State Fair Grandstand where vehicles are parked during the fair).
- Immediate plans call for the implementation of energy efficiency practices at two pilot sites (Rock Cut State Park and Jake Wolf Memorial Fish Hatchery) as part of Carbon Neutral Parks (CNP) project. The CNP project will identify and schedule upgrades to reduce carbon footprint at these sites. Site visits begin in late January.
- IDNR will identify two-to-four sites per region for the development of solar facilities. The effort will establish a goal to offset fossil fuel energy use 50-75 percent through the production of solar energy by 2025. Internal reviews of proposed sites nearly complete.
- IDNR will provide leadership on sustainable use of working agricultural lands by bringing 35 percent of leased acres under new, best-practices policy and 25 percent of acres in cover crops by 2022.
- Reopen the Conservation Reserve Enhancement Program (a component of the U.S. Dept. of Agriculture's Conservation Reserve Program) during summer 2020.

**Host: Illinois Department of Natural Resources, Office of Resource Conservation**

**Location:** One Natural Resources Way, Springfield, IL 62702

**Fellowship Supervisor:** Chris Young, Director, Office of Resource Conservation

**Position Description:**

Mission Statement

The mission of the Illinois Department of Natural Resources is to manage, conserve and protect Illinois' natural, recreational and cultural resources, further the public's understanding and appreciation of those resources, and promote the education, science and public safety of Illinois' natural resources for present and future generations.

Project

The Illinois Department of Natural Resources (IDNR) and state conservation organizations are working together to develop a hunter mentoring program. In this initiative, experienced hunters will be paired with youth or first-time hunters to assist in developing the skills, safety awareness and ethical foundation needed to develop the next generation of hunter/conservationists. IDNR will promote the program through a new website in development and connect interested constituents with conservation groups who will provide mentors. The Illinois Conservation Foundation will coordinate the development of the program, manage a database of volunteers and provide administrative support.

Position Responsibilities

The position is critical to providing administrative support to the Department of Natural Resources and the Illinois Conservation Foundation, potentially including database development.

Stakeholder communication and partner relationship development also are key responsibilities. With a large number of participating organizations, frequent and open communication will be important.

Research opportunities are available. The program is in the development phase and the potential exists to develop a monitoring and follow-up protocol to determine how a mentoring program might successfully to R3 efforts. Data gathered also will inform future decisions and directions for the program.

Hunting experience is desirable. The applicant should be familiar with the North American Model of Conservation. Some travel may be necessary to attend meetings and build relationships with partner organizations.

Additional Background

Non-profit conservation organizations, in partnership with State Fish and Wildlife Agencies, are working to stem nationwide declines in participation in traditional outdoors recreation, including hunting, trapping and fishing. States now employ R3 (Recruitment, Retention and Reactivation) strategies to attract and keep outdoors men and women engaged.

Hunter Mentoring Programs may contribute to an overall R3 strategy when implemented in concert with other programs, including hunter safety education, recreational shooting sports, skills classes and initiatives to open more land for hunting.

The number of certified license holders in Illinois has declined 12 percent since 2000 from a high of 336,203 in 2004 to 297,243 in 2017. The number of unique license holders is part of a formula used by

the U.S. Fish and Wildlife Service to help determine the distribution of matching Federal Funds to states. According to the U.S. Fish and Wildlife Service, 11.5 million people in the United States hunt.

The gradual decline in hunting and fishing license sales is a national trend that results in reduced revenues to State Natural Resources Agencies, and diminished capacity to carry-out habitat management, program development and research.