

Executive Resume - Edward Snell Ph.D.

Contact information

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Summary

Government, industry, and academic exposure. Thirty years of experience worldwide as a synchrotron radiation user. Twenty years' experience managing large research grants, almost a decades experience as Chief Executive officer and President of an independent not-for-profit research institute, six years' experience as director of a \$47.5M National Science Foundation Science and Technology Center promoting the use of X-ray Free Electron Lasers. Well-published and highly regarded member of the structural biology community, a fellow of the American Crystallography Association (the structural science society) and experienced with committee duties and board service and interaction.

Experience

- 2023 - present Chief Scientific Officer of the Hauptman-Woodward Medical Research Institute
- 2014 - 2023 Chief Executive Officer and President of the Hauptman-Woodward Medical Research Institute, a 501(3)c Not-for-Profit Independent Research Institute over 60 years old and based in Buffalo New York. A lean and efficient Institute with approximately 40 staff and an operational budget of ~\$7-8M yearly.
- 2018 - present Director of the National Science Foundation supported BioXFEL Science and Technology Center. A \$47.5M effort involving eight different institutions and over 100 people.
- 2017 - present Professor, Department of Materials Design and Innovation, SUNY at Buffalo, Buffalo NY
- 2016 - present Adjunct Professor, Cell Stress and Biophysical Oncology, Roswell Park Comprehensive Cancer Center, Buffalo NY
- 2010 - 2014 Senior Scientist, Hauptman-Woodward Medical Research Institute, Buffalo, NY
- 2005 - 2010 Research Scientist, Hauptman-Woodward Medical Research Institute, Buffalo, NY
- 1999 - 2005 Staff Scientist, NASA Laboratory for Structural Biology, Huntsville, AL. Worked in the project scientist role as the interface with extramural supported scientists and the NASA internal system.

Accomplishments

Run the institute with an unqualified audit opinion every year, the highest possible financial standard, and transitioned the institute from a largely single demographic into a gender and equity-diverse establishment growing a new generation of researchers. Widened the funding base

to increase support via industrial interactions returning funds generated into the institute and had a cash positive outcome for every year in the role.

Built up a Crystallization Center that is now the National Crystallization Center, an NIH-supported research resource. At the same time, raised funding and led the efforts to construct an \$8M cryo-electron microscopy center used by both academia and industry.

Operating the Industrial Macromolecular Crystallography Association beamline at the Advanced Photon Source for seven major pharmaceutical companies as members and almost 20 smaller biotech companies as subscribers. Provides operational support that keeps information confidential, and the competing companies satisfied.

Over the past 30 years received almost \$60M grant support as principal investigator or co-investigator with support from NIH, NSF, the DoD, NASA, DoE, and private foundations.

Published over 90 papers in international peer reviews journals, and books on topics such as Small Angle X-ray Scattering and Crystal Quality Analysis. Fellow of the American Crystallography Society.

Worked with a board of over 20 Buffalo community members encompassing a diverse representation of society and including those not typically found in a science, engineering, or computing environment. Strategically helped build the board so that members include senior representatives from adjacent institutions to build collaborative opportunities.

Board member of the Buffalo Niagara Medical Campus and voted in the top 250 most influential people in Western New York every year since 2015 by the business magazine, Buffalo First. Experience on committees as member and chair including chair of the SSRL Users Executive Committee twice, and chair of the NSLS-II structural biology proposal review committee. Service on international committees and advisory boards.

Awarded the NASA Marshall Space Flight Center Directors Commendation for establishing collaborative research between biological and solid-state groups.

Education

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| 1996 - 1999 | National Research Council Fellow with the NASA Biophysics Laboratory at Marshall Space Flight Center, Huntsville AL. Extended to the longest possible duration the program allowed due to performance in the role. |
| 1992-1996 | PhD. in Synchrotron Crystallography in the Chemistry Department at the University of Manchester, Manchester UK. Extensive experience with synchrotron work at Daresbury Synchrotron Radiation Source, and the European Synchrotron Radiation Facility. |
| 1992 | B.Sc. (Honors) First Class in Applied Physics at the Liverpool John Moore's University, Liverpool, UK. Only three in the year received this. |

Service

Reviewer for complex and high value multi-agency research programs. Service on NIH, NSF, DOE, and NASA review panels.

Additional Information

Experienced national facility user conducting experiments at synchrotrons in the USA (SSRL, APS, NSLS, NSLS-II, CHESS), Europe (Daresbury, ESRF, LURE, Diamond), and visiting worldwide (Spring-8, the Australian Synchrotron, ALS, MAX-IV, and PETRA-III), XFELs (LCLS, SwissFEL, and the EuXFEL), neutron sources (ILL, HFIR and the SNS at ORNL), and other particle beam sources.

Teaching experience with three graduate students and two masters' students, all successful in their subsequent careers, in a position that is not normally associated with teaching.

Conference and session organizer with multiple sessions organized at the American Crystallography Association, co-program chair in 2016, chair for the Gordon Research Conference on Diffraction methods also in 2016, chair of the BioXFEL conference in 2016 and 2023, and repeat instructor at the Granada Crystallization Workshop since 2013.

Political experience with state politicians and national representatives with visits to the house and senate. Also, service on the American Institute of Physics, News and Media Advisory Panel.