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Date of birth: February 26, 1971

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### EDUCATION

B.S. (1993), M.S. (1995), and Ph.D. (1998), Department of Chemistry, University of Tokyo, Japan (Mentor, Prof. Yoshio Umezawa)

### EMPLOYMENT

Postdoctoral fellow (1998–1999), Department of Chemistry and Biochemistry, University of Texas at Austin (Mentor, Prof. Allen J. Bard)

Postdoctoral fellow (2000–2001), Department of Chemistry, University of Tokyo, Japan (Mentor, Prof. Yoshio Umezawa)

Research Associate (2001), Department of Chemistry, University of Tokyo, Japan

Assistant Professor (2002–2008), Department of Chemistry, University of Pittsburgh

Associate Professor (2008–present), Department of Chemistry, University of Pittsburgh

### AWARDS

Fellowship for Graduate Studies (1993–1998), Japan Scholarship Foundation

Postdoctoral Fellowship (1998–2001), Japan Society for the Promotion of Science

Research Innovation Award (2003–2007), Research Corporation

Faculty Early CAREER Award (2007–2012), National Science Foundation

### EDITORIAL

News & Features Advisory Panel (2007–2009), *Analytical Chemistry*

### FUNDING

7 external and internal grants including 2 from the National Science Foundation and 1 from the National Institutes of Health.

### PUBLICATIONS (as independent investigator; 22 more publications as a PhD student and a postdoc fellow)

- (1) S. Amemiya, X. Yang, and T. L. Wazenegger "Voltammetry of the Phase Transfer of Polypeptide Protamines across Polarized Liquid/Liquid Interfaces," *J. Am. Chem. Soc.* **2003**, *125*, 11832–11833.
- (2) H. Xiong, J. Guo, K. Kurihara, and S. Amemiya "Fabrication and Characterization of Conical Microelectrode Probes Templated by Selectively Etched Optical Fibers for Scanning Electrochemical Microscopy," *Electrochem. Commun.* **2004**, *6*, 615–620.

- (3) Y. Yuan, L. Wang, and S. Amemiya "Chronoamperometry at Micropipet Electrodes for Determination of Diffusion Coefficients and Transferred Charges at Liquid/Liquid Interfaces," *Anal. Chem.* **2004**, *76*, 5570–5578.
- (4) Y. Yuan, and S. Amemiya "Facilitated Protamine Transfer at Polarized Water/1,2-Dichloroethane Interfaces Studied by Cyclic Voltammetry and Chronoamperometry at Micropipet Electrodes," *Anal. Chem.* **2004**, *76*, 6877–6886.
- (5) J. Guo, and S. Amemiya "Permeability of the Nuclear Envelope at Isolated *Xenopus* Oocyte Nuclei Studied by Scanning Electrochemical Microscopy," *Anal. Chem.* **2005**, *77*, 2147–2156.
- (6) J. Guo, Y. Yuan, and S. Amemiya "Voltammetric Detection of Heparin at Polarized Blood Plasma/1,2-Dichloroethane Interfaces," *Anal. Chem.* **2005**, *77*, 5711–5719.
- (7) H. Xiong, D. A. Gross, J. Guo, and S. Amemiya "Local Feedback Mode of Scanning Electrochemical Microscopy for Electrochemical Characterization of One-Dimensional Nanostructure: Theory and Experiment with Nanoband Electrode as Model Substrate," *Anal. Chem.* **2006**, *78*, 1946–1957.
- (8) J. Guo, and S. Amemiya "Voltammetric Heparin-Selective Electrode Based on Thin Liquid Membrane with Conducting Polymer-Modified Solid Support," *Anal. Chem.* **2006**, *78*, 6893–6902.
- (9) S. Amemiya, J. Guo, H. Xiong, and D. A. Gross "Biological Applications of Scanning Electrochemical Microscopy: Chemical Imaging of Single Living Cell and Beyond," *Anal. Bioanal. Chem.* **2006**, *386*, 458–471.
- (10) H. Xiong, J. Guo, and S. Amemiya "Probing Heterogeneous Electron Transfer at an Unbiased Conductor by Scanning Electrochemical Microscopy in the Feedback Mode," *Anal. Chem.* **2007**, *79*, 2735–2744.
- (11) P. J. Rodgers, and S. Amemiya "Cyclic Voltammetry at Micropipet Electrodes for the Study of Ion-Transfer Kinetics at Liquid/Liquid Interfaces," *Anal. Chem.*, **2007**, *79*, 9276–9285.
- (12) S. Amemiya "Chapter 7. Potentiometric Ion-Selective Electrodes," in *Handbook of Electrochemistry*, Ed. C. G. Zoski, Elsevier, **2007**, 261–294.
- (13) E. Kim, H. Xiong, C. C. Striemer, D. Z. Fang, P. M. Fauchet, J. L. McGrath, and S. Amemiya "A Structure–Permeability Relationship of Ultrathin Nanoporous Silicon Membrane: A Comparison with the Nuclear Envelope," *J. Am. Chem. Soc.*, **2008**, *130*, 4230–4231.
- (14) P. J. Rodgers, P. Jing, Y. Kim, and S. Amemiya, "Electrochemical Recognition of Synthetic Heparin Mimetic at Liquid/Liquid Microinterfaces," *J. Am. Chem. Soc.*, **2008**, *130*, 7436–7442.
- (15) Y. Kim, and S. Amemiya "Stripping Analysis of Nanomolar Perchlorate in Drinking Water with a Voltammetric Ion-Selective Electrode Based on Thin-Layer Liquid Membrane," *Anal. Chem.*, **2008**, *80*, 6056–6065.
- (16) S. Amemiya, A. J. Bard, F. R.-F. Fan, M. V. Mirkin, and P. R. Unwin "Scanning Electrochemical Microscopy," *Ann. Rev. Anal. Chem.*, **2008**, *1*, 95–131.

## PATENT

S. Amemiya, and Y. Kim "Electrochemical Sensors, Sensor Systems and Method of Sensing Analytes," filed for a provisional application to the US Patent and Trademark Office.

## PRESENTATIONS

57 presentations including 10 invited department seminars and 14 invited presentations at conferences.

## MENTORING

4 postdoctoral fellows, 1 PhD student, 2 MS students, 4 current graduate students, and 6 undergraduate students.

## REVIEW

15 reviews for national grant proposals and >100 reviews of journal articles.