Resources for Investigating Careers and Gaining Training and/or Experience Away from the Bench

(Links to Internet sites are provided for your convenience and do not constitute an endorsement.) (This list is in no way comprehensive & is meant only as a starting point to guide your exploring career options.)

Overview of Various Fields (Copies available for loan in the OITE career library.)

Fiske, Peter, *Put Your Science to Work* Kreeger, Karen Young, *Guide to Non-traditional Careers in Science* Robbins-Roth, Cynthia, *Alternate Careers in Science*

Adult Education

Speak with the Academic Dean, the Chair of the Science Division, or the appropriate department head at local colleges, universities, and community colleges about teaching opportunities in credit courses; contact the Continuing Education Division about teaching non-credit courses.

Association of Community Colleges: http://www.aacc.nche.edu/

Council for Adult & Experiential Learning: http://www.cael.org/

Biotech Industry/Pharmaceuticals

Recruiting events: BioSpace: <u>http://www.biospace.com/hotbed.aspx?RegionId=9</u>

Freedman, Toby, *Career Opportunities in Biotechnology & Drug Development* (available for loan in OITE career library)

Richard Friary, Jobs in the Drug Industry (available for loan in OITE career library)

Tech Council of Maryland/MdBio: http://techcouncilmd.com/mdbio/

NIH Special Interest Groups (SIG's) — Biosciences Business Interest Group: <u>http://tango01.cit.nih.gov/sig/home.taf?_function=main&SIGInfo_SIGID=119</u>

Moussalli, Carole and the staff of Vault, Vault Career Guide to Biotech

Business Development

Sloan Biotechnology Industry Center (understanding competitive advantage in the biotechnology industry): <u>http://www.sbic.umd.edu/</u>

Read chapter 10 in Cynthia Robbins-Roth book, Alternate Careers in Science (See top of page.).

NIH Special Interest Groups (SIG's) — Biosciences Business Interest Group: http://tango01.cit.nih.gov/sig/home.taf? function=main&SIGInfo_SIGID=119

Business Information Services

Read chapter 5 in Cynthia Robbins-Roth book, Alternate Careers in Science (See top of page 1.).

NIH Special Interest Groups (SIG's) — Biosciences Business Interest Group: <u>http://tango01.cit.nih.gov/sig/home.taf?_function=main&SIGInfo_SIGID=119</u>

Executive Search

American Society of Association Executives: <u>http://www.asaecenter.org</u>. Click on "Your Career." Click on "Executive Recruiter List" for list of executive search groups and names of principals with whom to conduct informational interviews.

Read chapter 18 in Cynthia Robbins-Roth, Alternate Careers in Science (See top of page 1.)

Forensics

<u>Forensic Magazine</u>: <u>http://www.forensicmag.com/articles.asp?pid=16</u> –article on microbial forensics

Master's of forensic science in forensic molecular biology: http://www.gwu.edu/~forensic/academics/forensic_molecular_biology.cfm

Grants Administration

NIH Center for Scientific Review: http://cms.csr.nih.gov/AboutCSR/Welcome+to+CSR

Health Care Planning

Centers for Medicare and Medicaid Services: http://www.cms.hhs.gov/

Informal Science Education

For information interviews, contact Marian Koshland Science Museum: http://www.koshland-science-museum.org

Science Café Movement: <u>http://www.sciencecafes.org/</u>

National Chemistry Week. Public outreach program of the American Chemical Society: <u>http://www.acs.org/ncw</u>

K-12 Science Education

Transitioning from laboratory to classroom (conjoint program between the Montgomery County, MD, Public Schools & the University of Maryland): http://www.education.umd.edu/EDCI/info/tlc.htm

Second career chemistry teachers: <u>http://www.hachscientificfoundation.org/teachers.shtml</u>

Certification requirements for the 50 U.S. states: <u>http://www.uky.edu/Education/TEP/usacert.html</u>

National Center for Education Information (information about alternate certification): http://www.ncei.com/

National Center for Alternate Certification: <u>http://www.teach-now.org/</u>

U.S. Department of Education: <u>http://www.ed.gov/index.jhtml</u>

Management Consulting

For information interviews, contact McKinsey & Co.: http://www.mckinsey.com

For information interviews, you can also contact Booz/Allen/Hamilton: http://www.boozallen.com

Samarth Kulkarni. Management consulting for scientists. *Nature Biotechnology* **25**, 1489 - 1490 (2007)

Medical & Scientific Illustration

Careers in Medical and Scientific Illustration: Biomedical Communications. By Institute for Career Research, Ill Institute for Career Research (Chicago, Institute for Career Research (Chicago, Ill.), John Prescott Published by Institute for Career Research, 2000

Johns Hopkins University School of Medicine: Dept. of Art as Applied to Medicine: <u>http://www.hopkinsmedicine.org/medart/</u>

For informational interviewing, contact NIH Medical Arts & Printing Services: <u>http://medarts.nih.gov/</u>

Patent Law/Intellectual Property

Association of American Universities—Patent Policy: <u>http://www.aau.edu/policy/patent_policy.aspx?id=7372</u>

Read chapter 13 in Cynthia Robbins-Roth, Alternate Careers in Science (See top of page 1).

U. S. Patent & Trademark Office: http://www.uspto.gov

NIH Special Interest Groups (SIG's) — Patent Law & Technology Interest Group: <u>http://tango01.cit.nih.gov/sig/home.taf?_function=main&SIGInfo_SIGID=159</u>

Product Development

Product Development and Management Association: <u>http://www.pdma.org/</u>

Regulatory Affairs

M.S. in Bioscience Regulatory Affairs http://www.advanced.jhu.edu/academic/biotechnology/bioscience

Regulatory Affairs Professional Society: http://www.raps.org/personifyebusiness/

Association of Food and Drug Officials: http://www.afdo.org/afdo/Who-is-AFDO.cfm

Food and Drug Administration: <u>http://www.fda.gov</u>

Read chapter 12 in Cynthia Robbins-Roth, Alternate Careers in Science (See top of page 1.).

NCI-FDA Research & Regulatory Affairs Fellowships: http://www.fda.gov/oc/factsheets/fellowship.pdf

Science-Based Investment Advising

Contact an investment house and ask to set up an information meeting with an analyst who follows stocks in pharma., the biotech. industry, etc. E.g. T. Rowe Price: <u>http://www.troweprice.com</u>; Goldman Sachs: <u>http://www.goldmansachs.com</u>; Lehman Brothers: <u>http://www.lehmanbrothers.com/</u>

Read chapters 7 & 8 in Cynthia Robbins-Roth book, *Alternate Careers in Science* (See top of page.).

Science Policy

Georgetown University, Dept. of Microbiology & Immunology. M.S. degree in Biomedical Science, Policy & Advocacy: <u>http://microbiology.georgetown.edu</u>

AAAS science & technology policy fellowships: http://fellowships.aaas.org

ACS Public Policy fellowships: <u>http://www.acs.org/</u> Click on "Policy" tab. Click on "Public Policy Fellowships" under "ACS on the Hill."

Read chapter 21 in Cynthia Robbins-Roth, Alternate Careers in Science (See top of page 1.).

Science Writing

M.A. in writing—science-medical writing focus: <u>http://www.advanced.jhu.edu/academic/writing</u>

"Getting Started with Science Writing" article: http://www.biocareercenter.com/article/getting_started_with_science_writing.html

National Association of Science Writers: http://www.nasw.org/

Society for Technical Communication: http://www.stc.org/

American Medical Writers Association: http://www.amwa.org

Education Writers Association: http://www.ewa.org/

A comprehensive listing of links to information about 4 fields of science writing; namely, science journalism, medical writing, technical writing & editing, and marketing: <u>http://www.geocities.com/capecanaveral/hangar/4707/write.html</u> (including links to some of the associations referenced above).

Read chapters 2 & 3 in Cynthia Robbins-Roth book, *Alternate Careers in Science* (See top of page.).

Scientific Association Management

American Society of Association Executives—<u>http://www.asaecenter.org</u>. Click on "Your Career." Click on "Careers in Associations."

Encyclopedia of Associations — 3 volume reference books in libraries

<u>Associations Unlimited</u>—the online counterpart of the *Encyclopedia of Associations:* <u>http://nihlibrary.nih.gov/Features/associations.htm</u>

Technical Sales

A comprehensive listing of vendors of scientific products & services: <u>http://www.biochemweb.org/vendors.shtml</u>. Click on the links in the listing to research various companies & arrange informational interviews (and later, perhaps, for job search purposes).

Read chapter 15 in Cynthia Robbins-Roth, Alternate Careers in Science (See top of page 1).

NIH Special Interest Groups (SIG's) — Biosciences Business Interest Group: <u>http://tango01.cit.nih.gov/sig/home.taf?_function=main&SIGInfo_SIGID=119</u>

Tech Transfer

Fellowship opportunities—<u>http://ott.od.nih.gov/about_nih?TTRA.html</u>

Online Technology Transfer Training—<u>http://tttraining.od.nih.gov?cbts/tesweb?login.asp</u>

Internship opportunities in Tech. Transfer-<u>http://www.ott.nih.gov/about_nih?intern.html</u>

Certificate in Technology Transfer—15 credit units, with 12 units of in-class coursework and a final independent project of 3 units. Part-time evening program for working professionals and postdoctoral fellows offered through FAES Graduate School at NIH. <u>http://www.faes.org</u>.

Association of University Technology Managers: http://www.autm.net

Technology Transfer Society: http://www.t2society.org

Licensing Executive Society (LES): http://www.lesi.org

Kaufmann Foundation: http://www.kauffman.org

Federal Lab Consortium: <u>http://www.federallabs.org</u>

Techno-L Listserv: http://www.techno-l.org

Read chapter 16 in Cynthia Robbins-Roth, Alternate Careers in Science (See top of page 1.).

NIH Special Interest Groups (SIG's) — Patent Law & Technology Interest Group: <u>http://tango01.cit.nih.gov/sig/home.taf?_function=main&SIGInfo_SIGID=159</u> **Venture Capital** (examples only, focusing on local Maryland resources)

Maryland Industrial Partnerships: <u>http://www.mips.umd.edu/</u>

Maryland Technology Enterprise Institute: <u>http://www.mtech.umd.edu/</u>

Maryland Department of Business & Economic Development: http://www.choosemaryland.org/businessinmd/Biosciences/bio.html

Maryland Business Incubation Association: <u>http://www.mdbusinessincubation.org/</u> Biosciences Business Interest Group: <u>http://tango01.cit.nih.gov/sig/home.taf?_function=main&SIGInfo_SIGID=119</u>

NIH Special Interest Groups (SIG's) — Biosciences Business Interest Group: <u>http://tango01.cit.nih.gov/sig/home.taf?_function=main&SIGInfo_SIGID=119</u>

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Date: November 14, 2008