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Analytical
System

How To Juggle

**Chemistry, Computers, and Business Interests:
Perspectives on the Career Transition from
Information Buyer to Information Supplier**

Gregory M. Banik, Ph.D.

**American Chemical Society Meeting
Chicago, IL August 29, 2001**

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Agenda



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- Map Out Career and Career Changes
- What I Learned
- What I Did as a Result of What I Learned

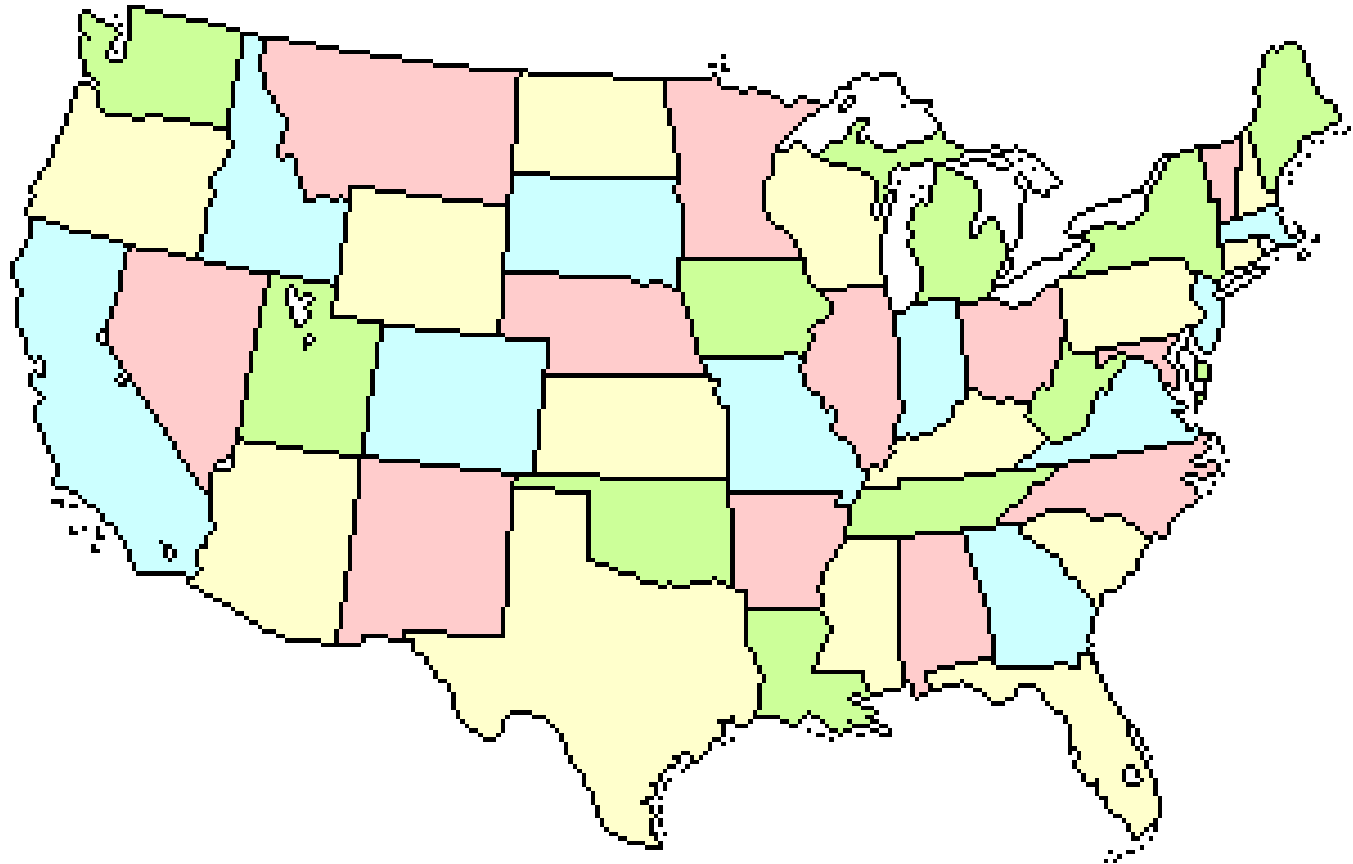
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Career Map



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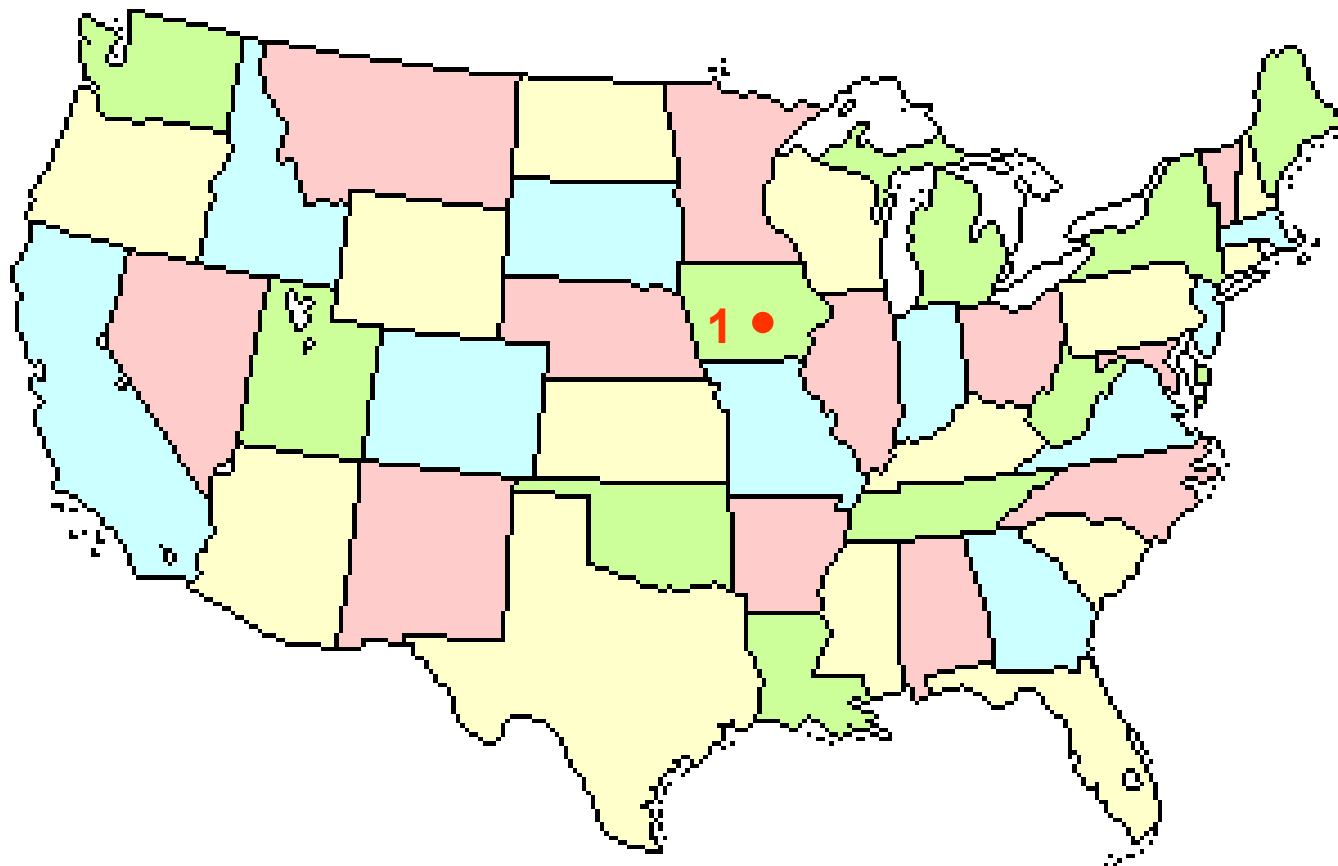


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Career Map



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(1) Grinnell College – Grinnell, IA

B.A. Chemistry / Computer Science

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What I Learned



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- I like chemistry
- I like computers

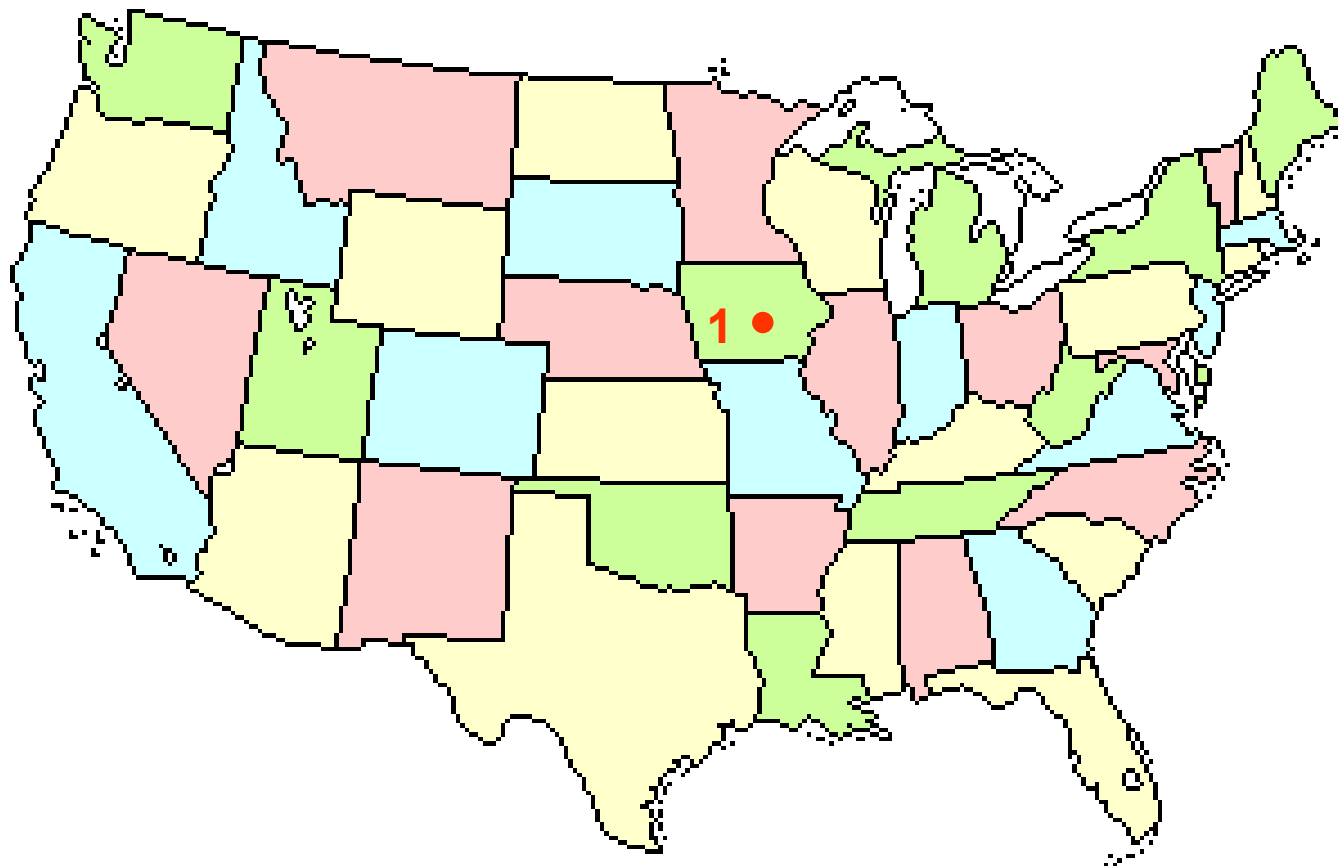
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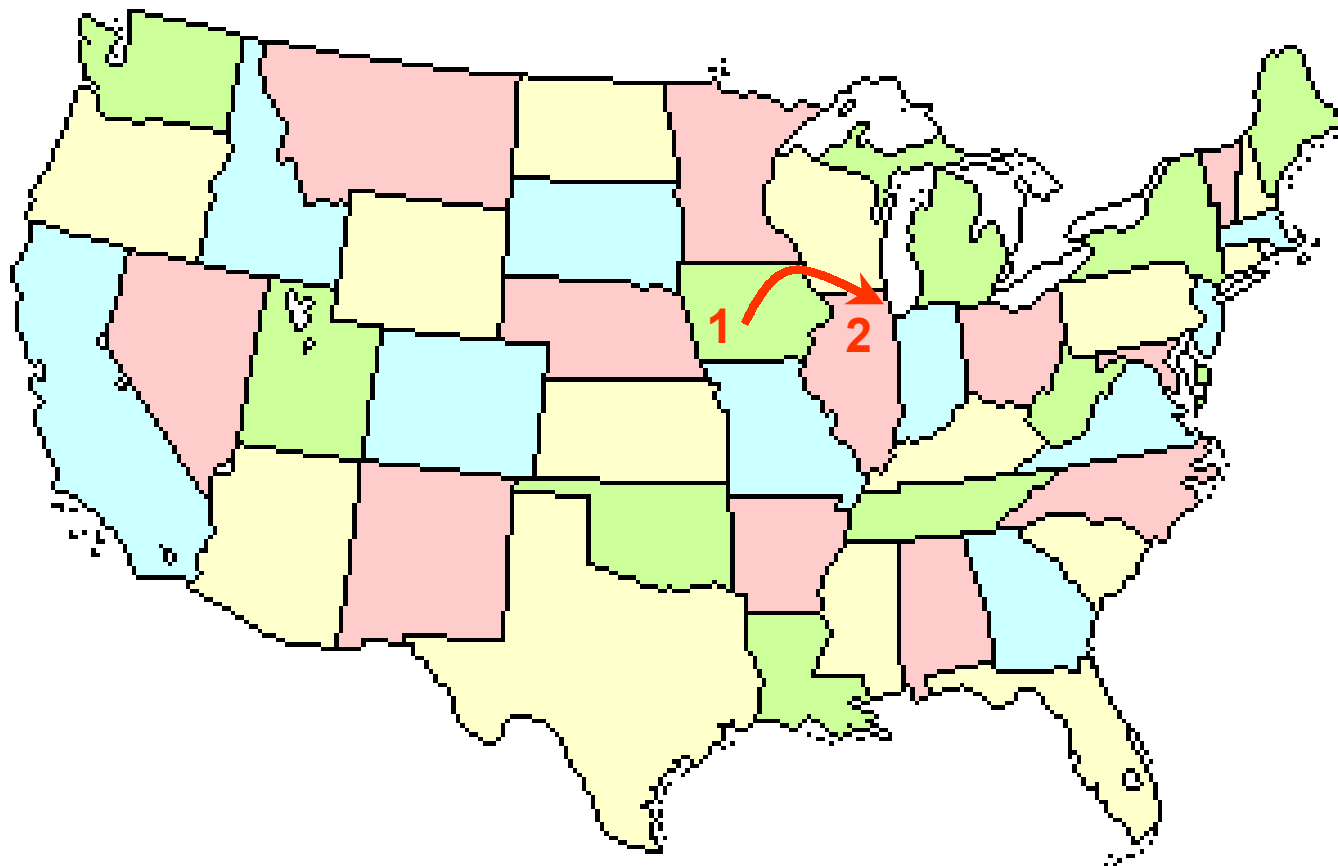
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Career Map



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(2) Northwestern University – Evanston, IL
Ph.D. Bio-Organic Chemistry / Lecturer

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What I Learned



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- I was a good chemist, but...
- I didn't care for working in the lab
- I liked teaching
- I still liked chemistry
- I still liked computers
- I wanted to pursue a career that linked computers and chemistry

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What I Did



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- I contacted Dr. Yvonne Martin at Abbott Laboratories about a job in her Computer Assisted Molecular Design (CAMD) Group
- Yvonne passed my name on to Steve Schmidt in the PPD R&D Information Group

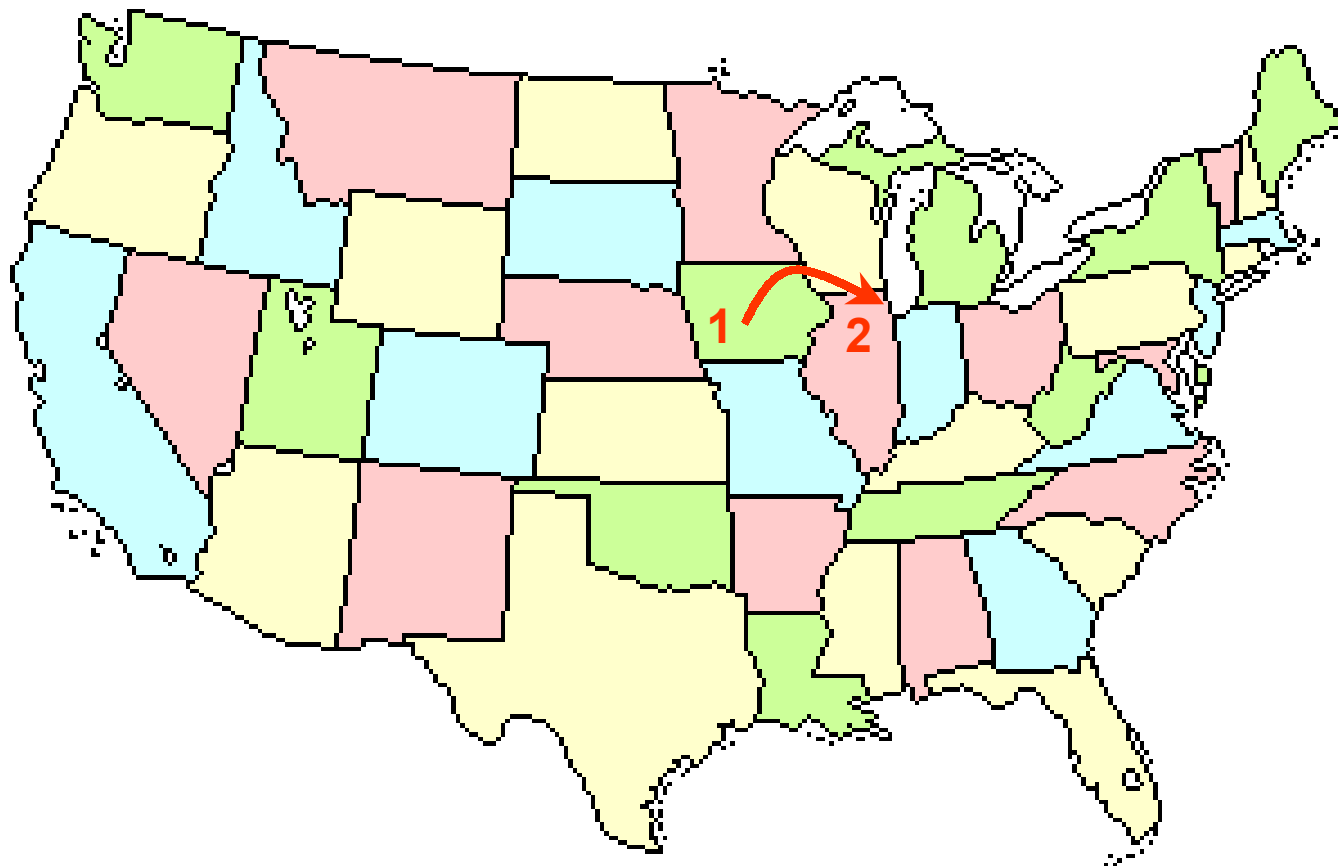
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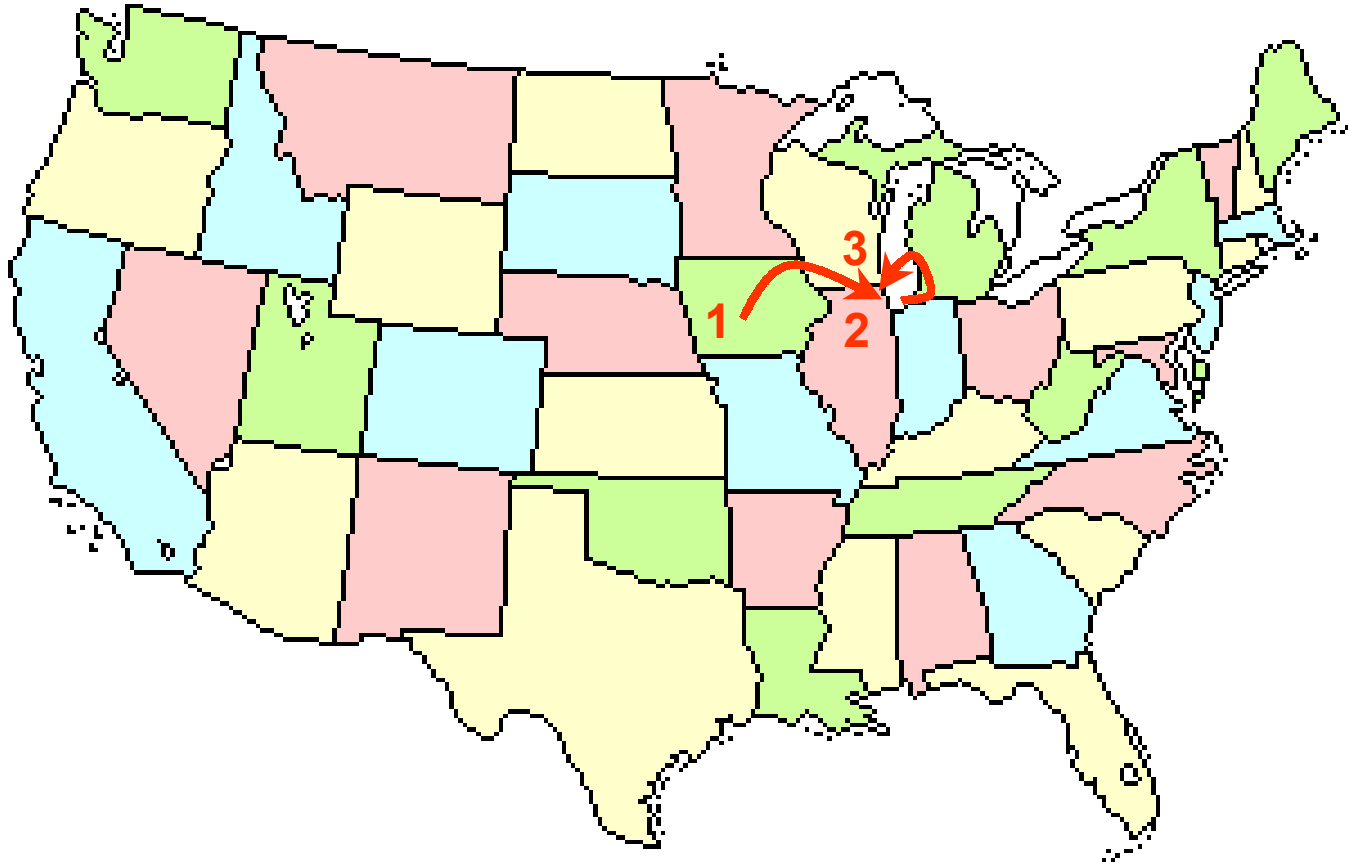
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Career Map



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(3) Abbott Laboratories – North Chicago, IL
Scientific Information Manager, PPD R&D

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What I Learned



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- Networking works!
- I ***really liked*** managing chemical information
- Because you spend lots of money with them, cheminformatics vendors treat you very well
- I became interested in business through conversations with a colleague who got an MBA after receiving his BA in chemistry

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What I Did



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- I started in the MBA program at the University of Chicago
- I was bitten by the marketing bug
- I applied for positions outside Abbott that would transition my career from an information buyer to information supplier

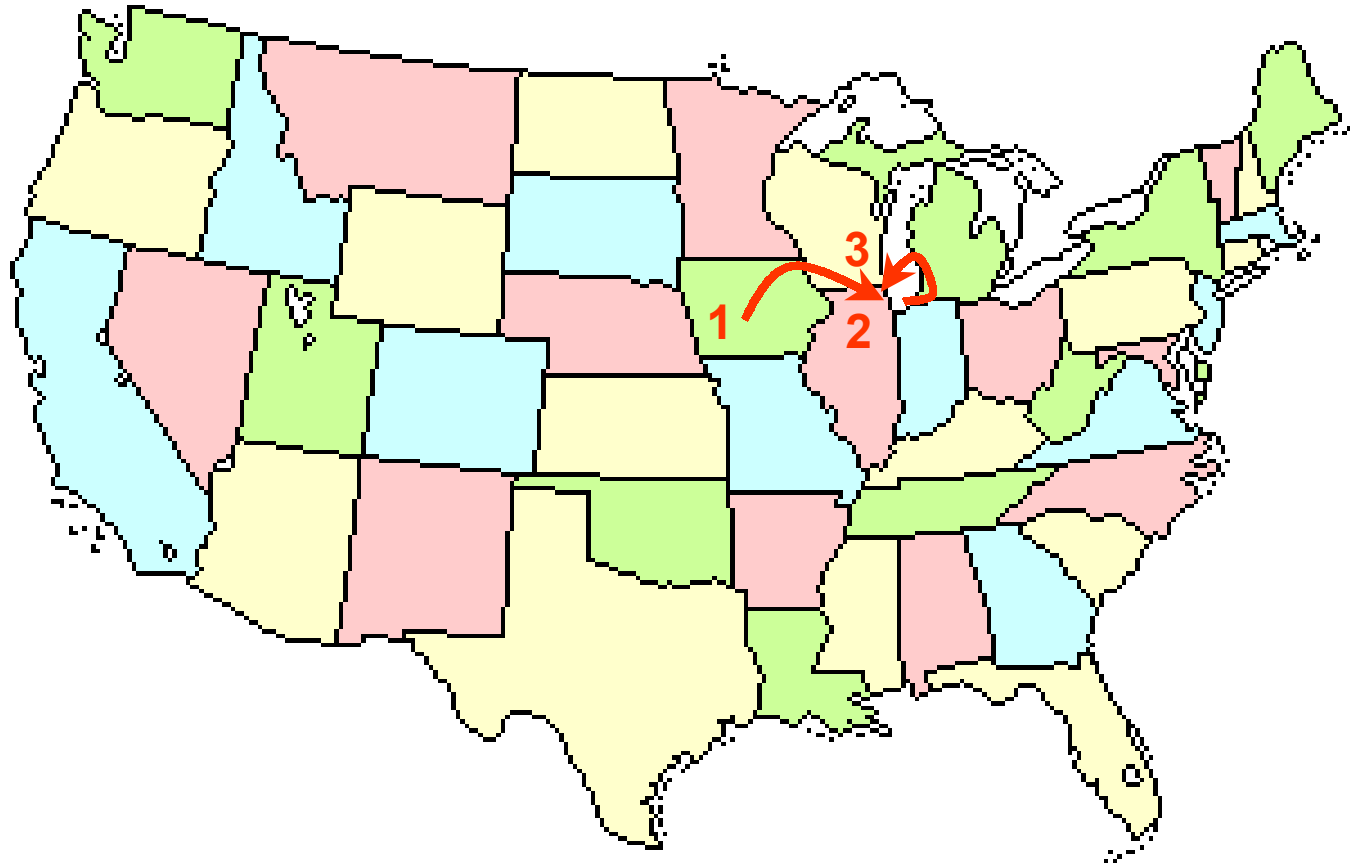
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Career Map



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(3) Abbott Laboratories – North Chicago, IL
Scientific Information Manager, PPD R&D

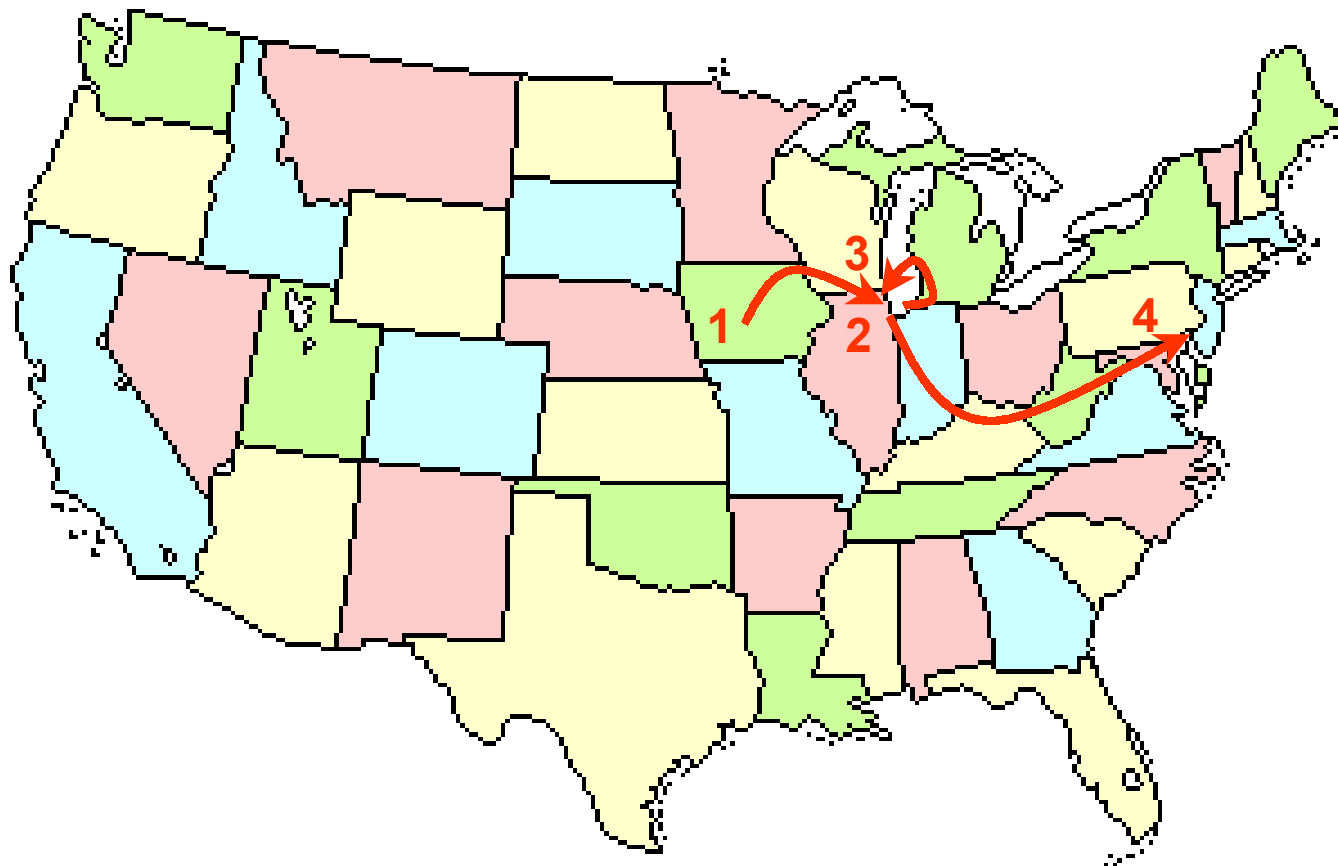
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(4) ISI – Philadelphia, PA

New Product Mgr., Chem. Info. Products

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What I Learned



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- Combining a chemistry degree with business school training makes you an attractive candidate to cheminformatics companies
- Cheminformatics vendors don't treat you as nicely when you are not buying things from them
- I ***really liked*** developing new chemical information products
- Things don't stay the same...

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What I Did



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- I contacted my network of friends and colleagues and got more companies interested than I had made contacts
- Ultimately, I followed the management exodus from ISI

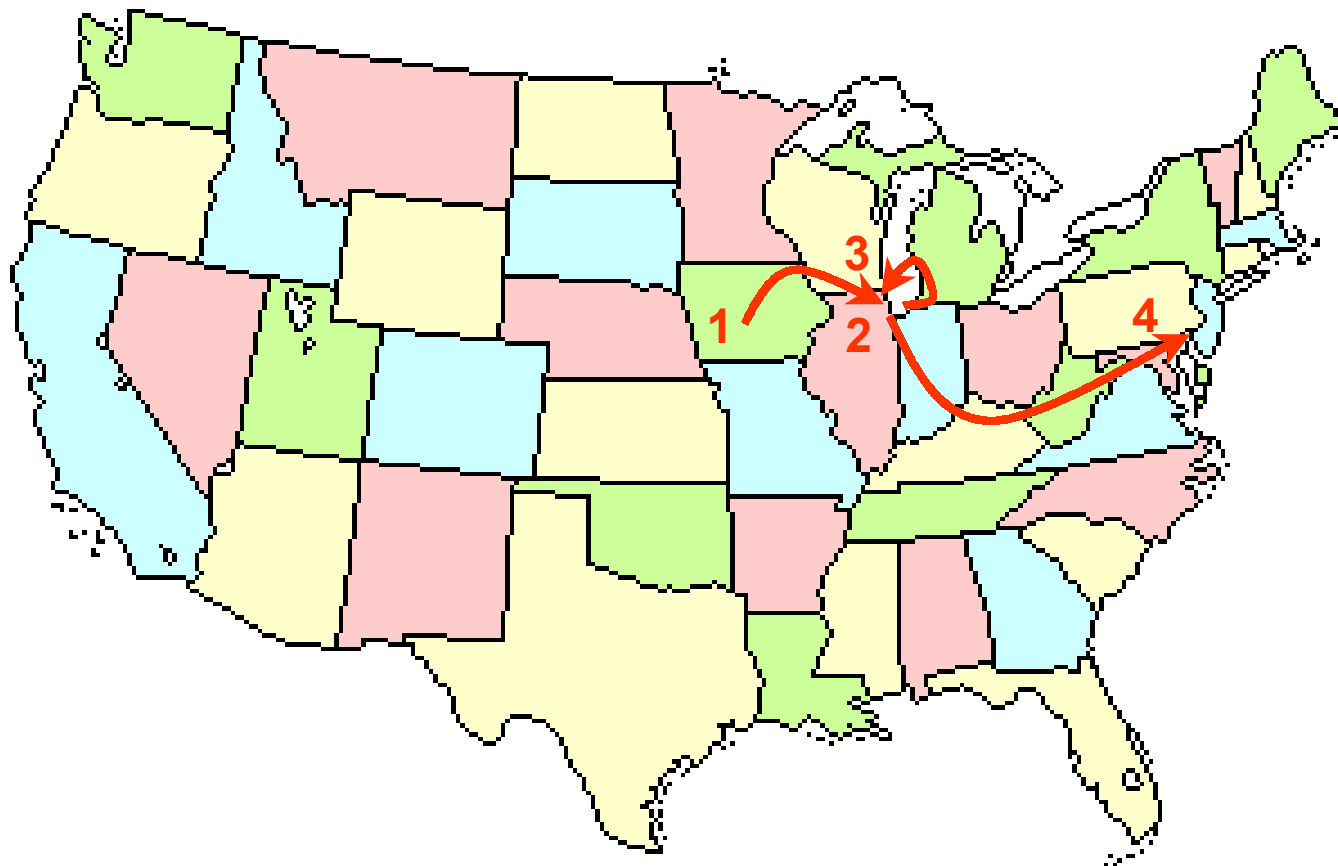
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(4) ISI – Philadelphia, PA

New Product Mgr., Chem. Info. Products

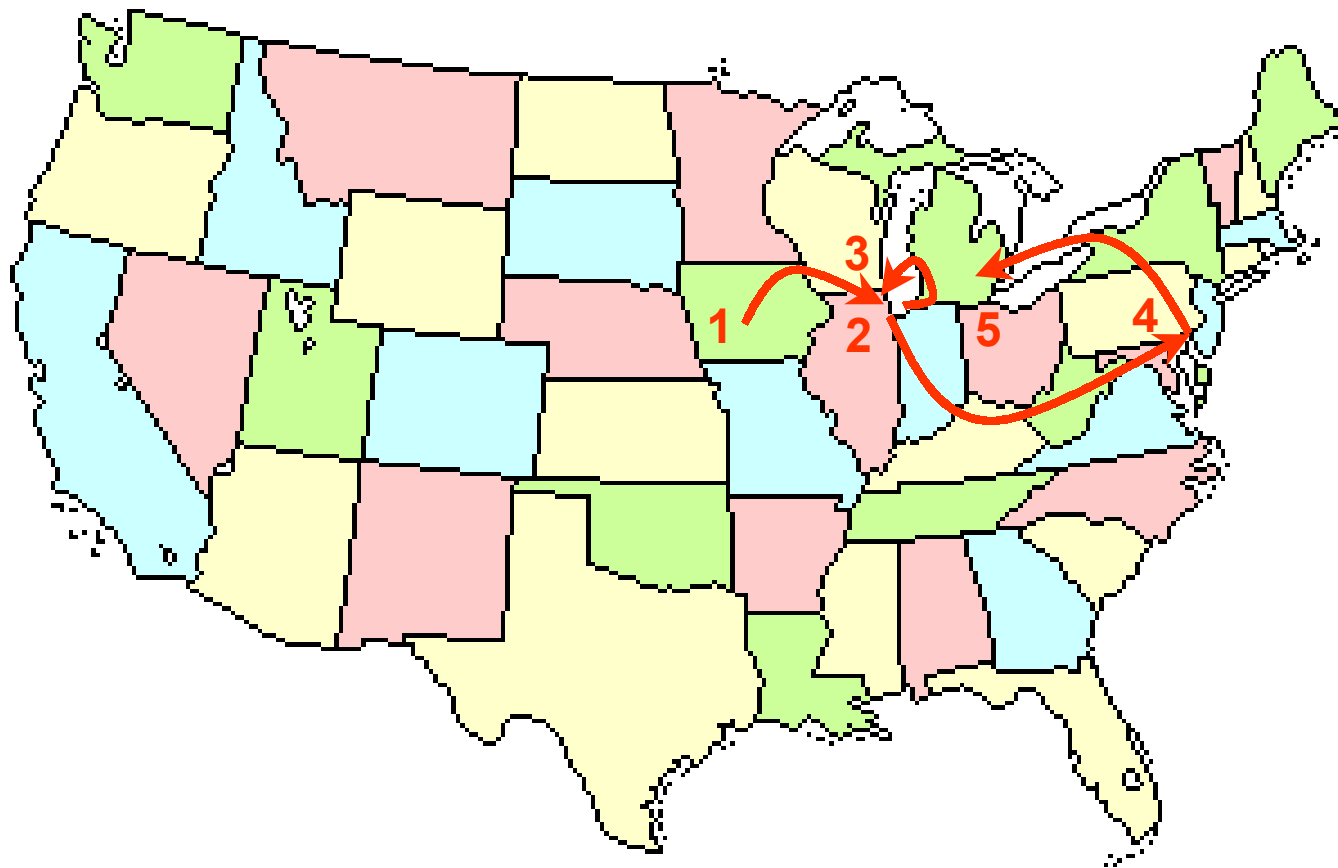
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(5) UMI – Ann Arbor, MI

Director, Marketing & Product Mgmt.

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What I Learned



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- Focusing on non-chemical business information products can be fun and rewarding
- Downsizings happen
- There are no cheminformatics companies in the Detroit area
- If you interview for a marketing position at a company not in the cheminformatics market, they say “You have a Ph.D. in chemistry, and you’re doing marketing?”

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What I Did



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- I contacted my network of friends and colleagues
- I found a job on the Internet for a position as Director, Business Development at MSI (now Accelrys)

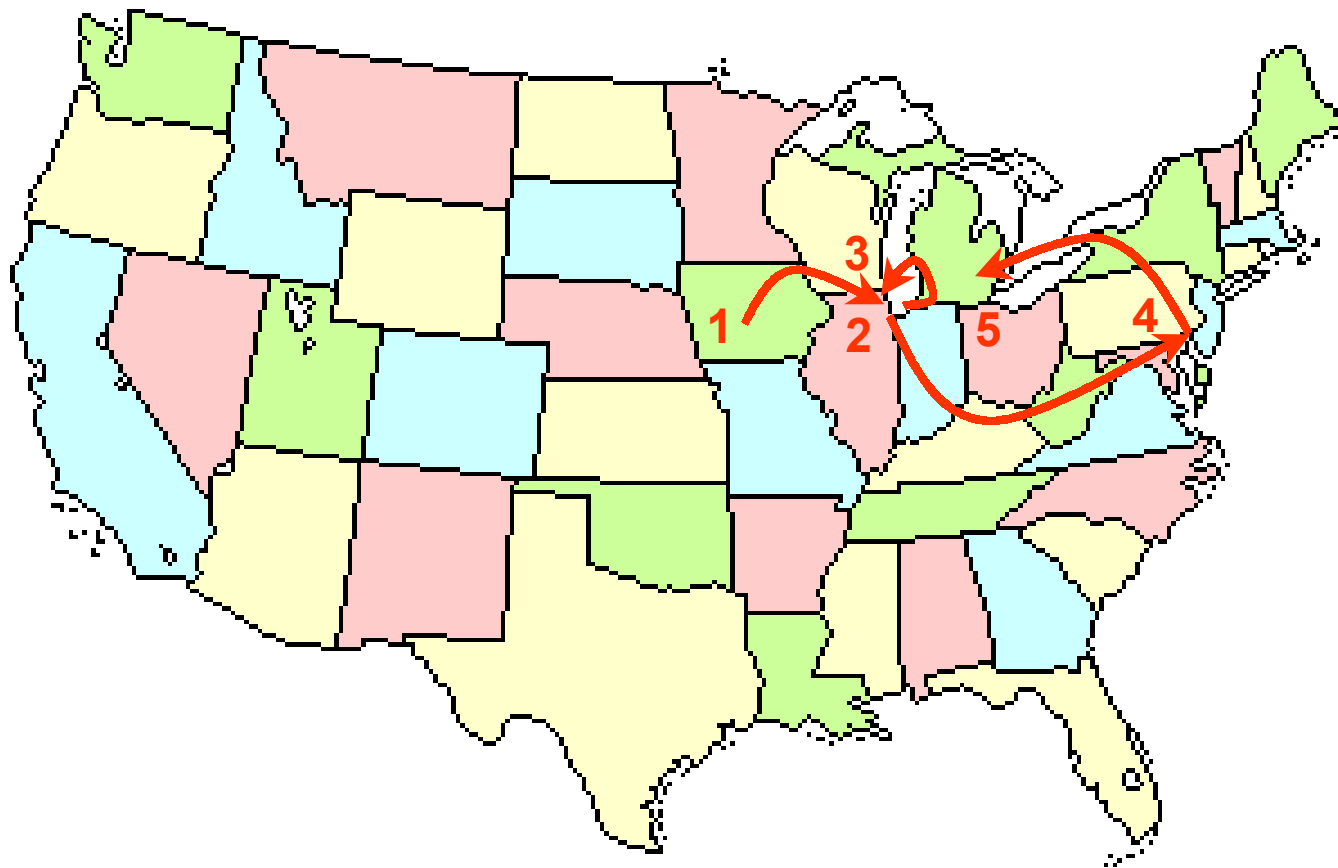
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Career Map



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(5) UMI – Ann Arbor, MI

Director, Marketing & Product Mgmt.

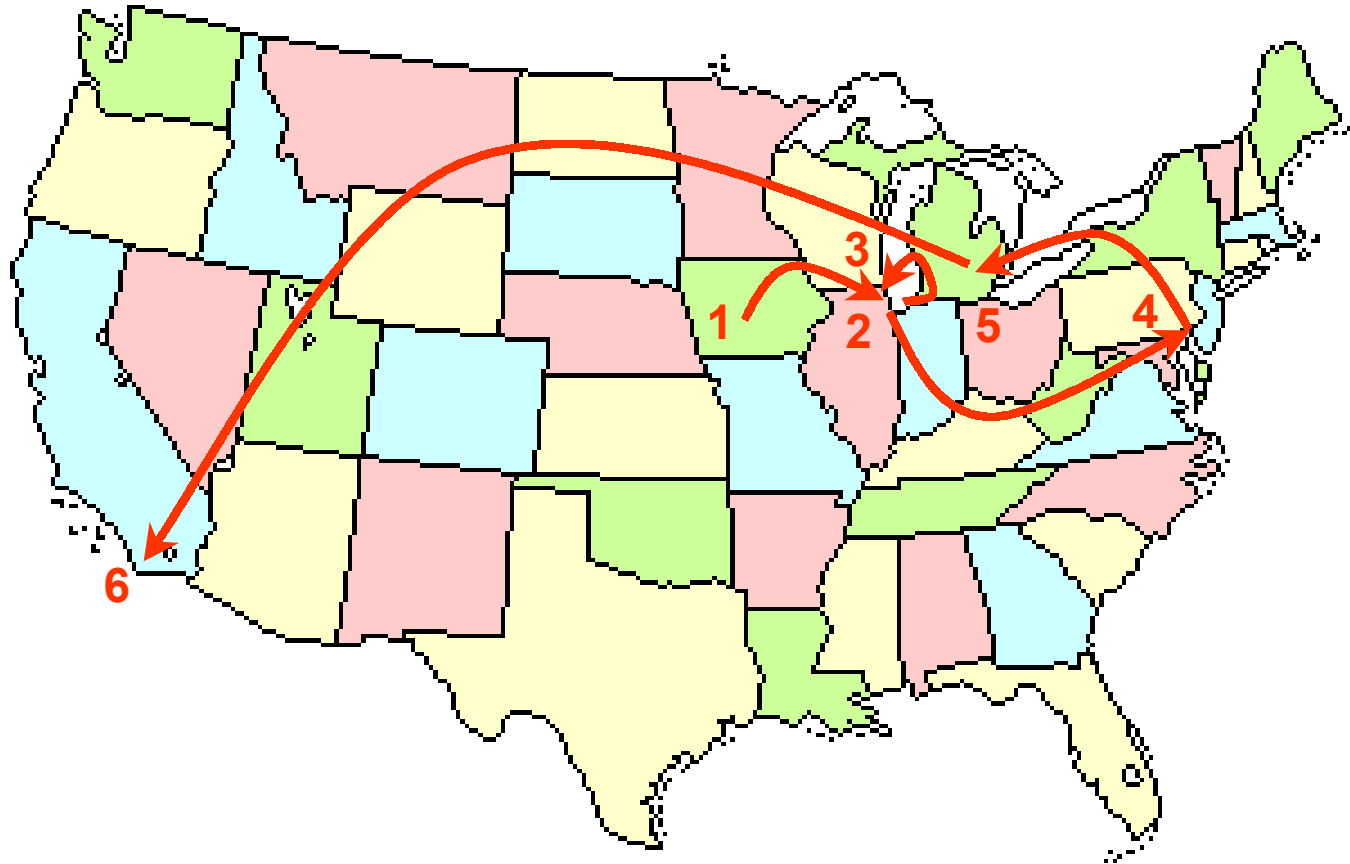
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(6) MSI – San Diego, CA
Director, Business Development

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What I Learned



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- When you interview for a marketing position at a company in the cheminformatics market, they say “You have a Ph.D. in chemistry, and you’re doing marketing!”, i.e.,
- Combining chemistry, informatics, and business experience is valuable and appreciated far more in cheminformatics than elsewhere
- The chemical information community is like family

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What I Did



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- After working at ISI, UMI, and MSI, I seemed destined to work next at MCI, FBI, or any other organization with a three-letter acronym that ended in “I”, but...
- After a year at MSI, I was contacted by an executive recruiter about a position as the General Manager of the Sadtler Division of Bio-Rad Laboratories

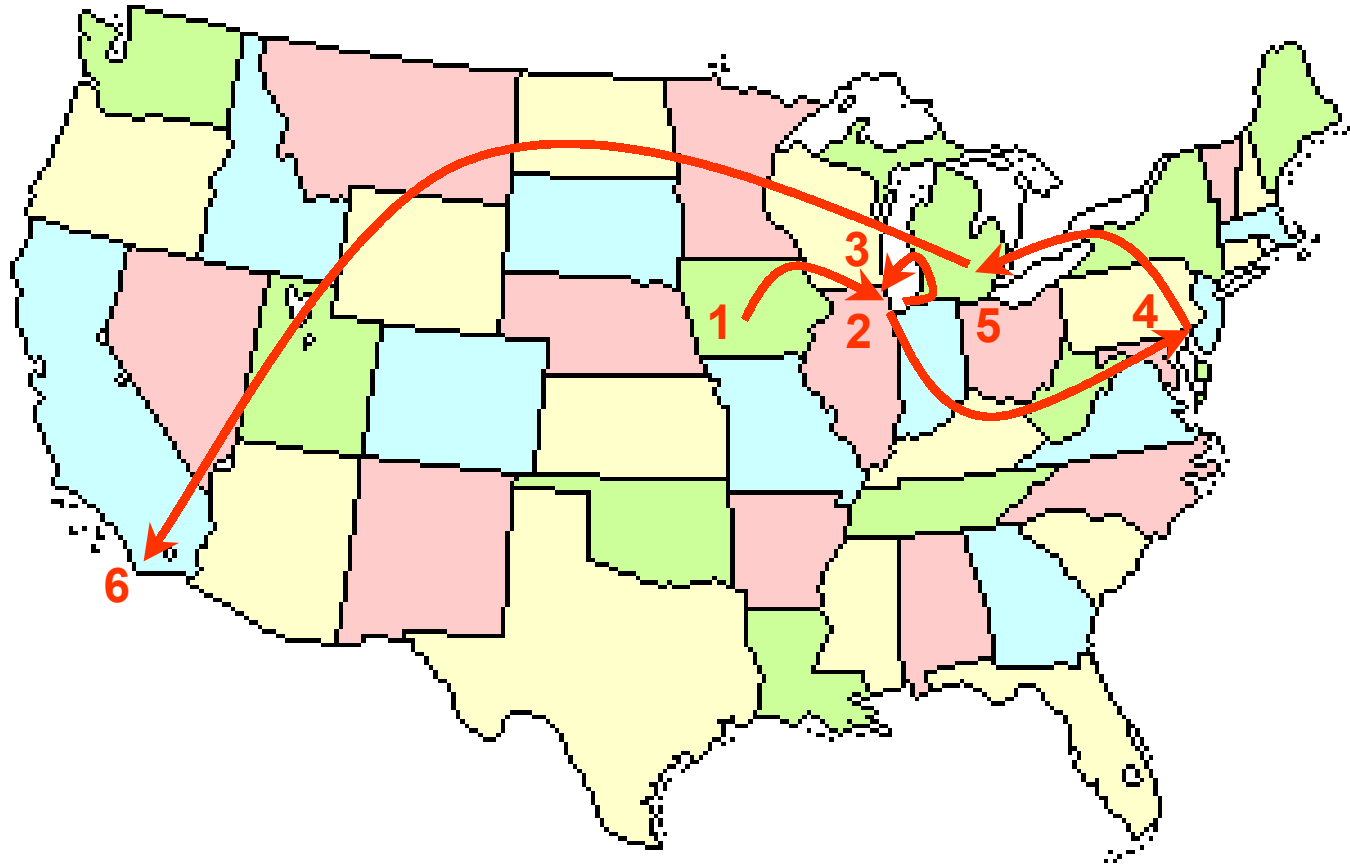
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(6) MSI – San Diego, CA
Director, Business Development

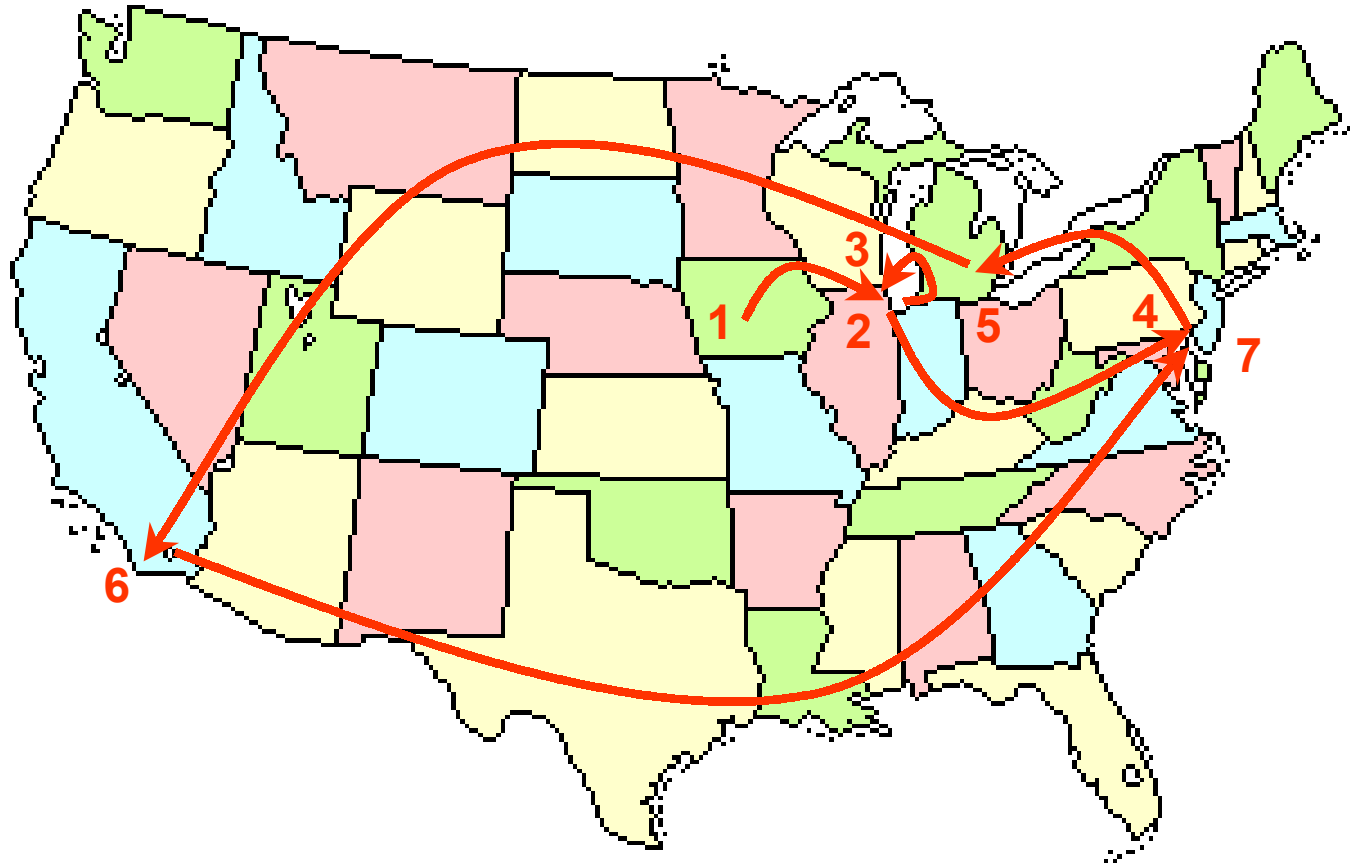
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(7) Bio-Rad Laboratories – Philadelphia, PA
General Manager, Sadtler / Informatics Division

About Bio-Rad and Sadtler



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- The Sadtler business has been in existence for over 125 years, specializing in analytical chemistry, spectral information and informatics software
- The Sadtler business has been part of Bio-Rad Laboratories since 1979
- Through focusing on quality, Sadtler has remained the world leading brand in analytical informatics

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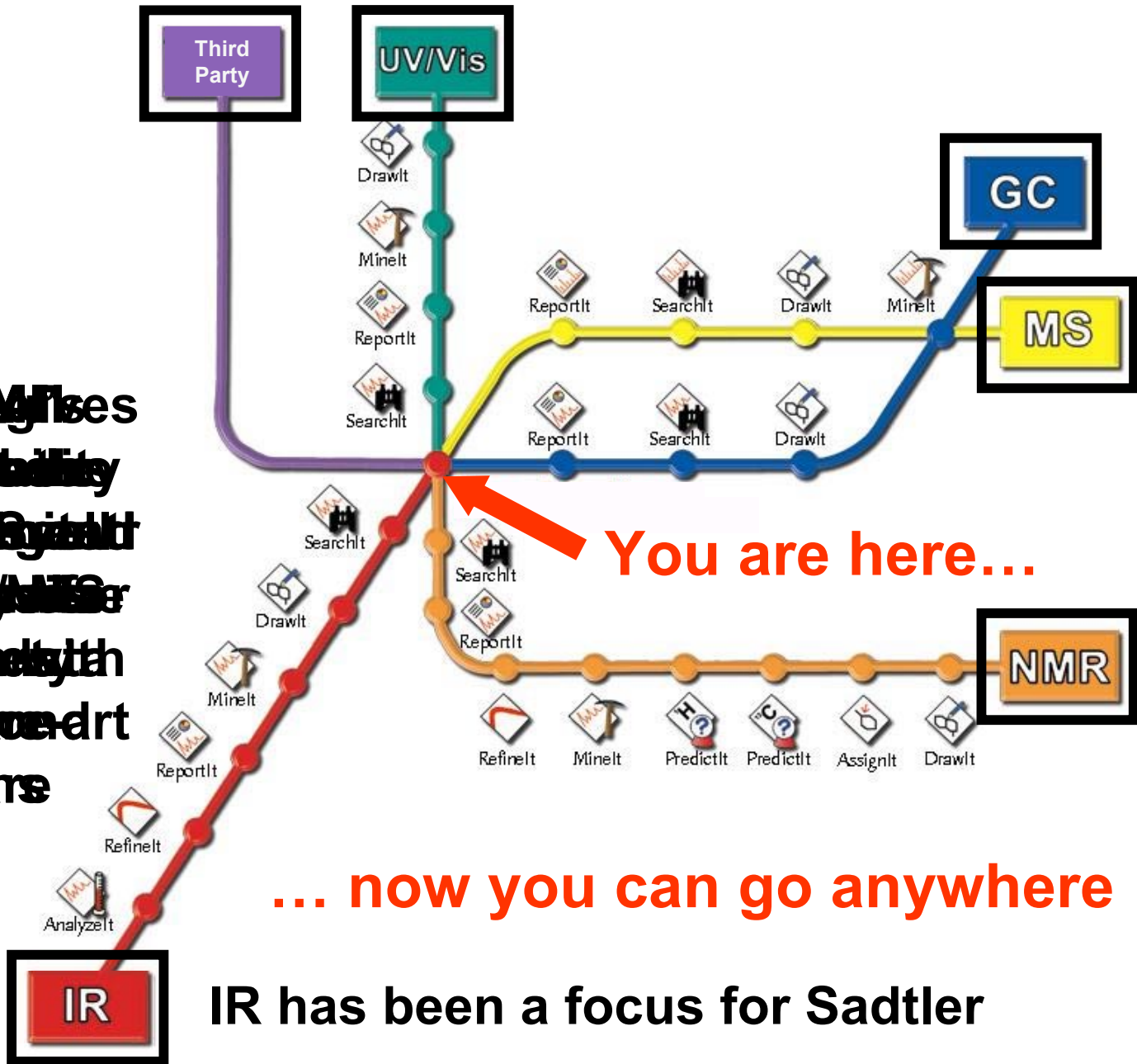
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KnowItAll uses
off-the-shelf
tools to
analyze
data from
various
sources
to
provide
a
single
view
of
the
data
and
its
relationships.

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IR has been a focus for Sadtler

Chemistry
NMR

PredictIt CNMR

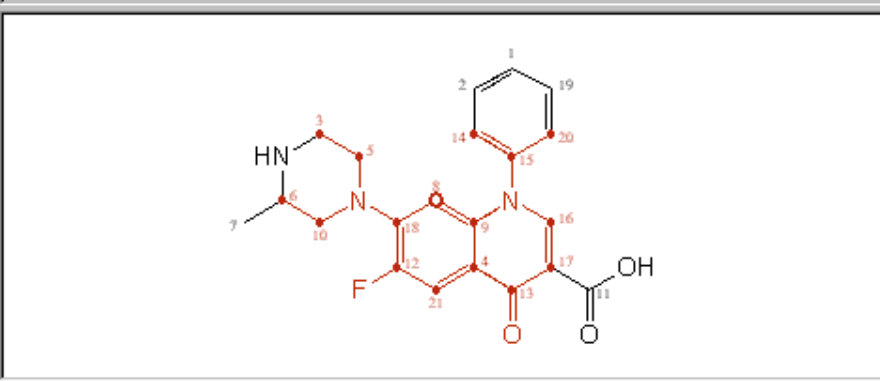
-  SearchIt CNMR
-  SearchIt HNMR
-  Minelt CNMR
-  Minelt HNMR
-  PredictIt CNMR
-  PredictIt HNMR
-  AssignIt CNMR

- 118.90±0.00(1)
- 44.10±1.77(2)
- 129.00±1.66(918)
- 124.90±3.99(3004)
- 153.50±2.55(11)
- 168.10±3.55(46)
- 52.00±0.00(1)
- 105.50±0.00(1)
- 4 105.50±0.00(1)
- 3 Double Click to Load
- 2 Double Click to Load
- 1 Double Click to Load
- 11.35±5.44(2)
- 50.25±0.66(2)
- 51.90±0.00(1)
- 175.80±2.22(20)
- 112.10±2.77(15)
- 124.10±0.00(2)
- 129.00±1.66(918)
- 144.20±0.00(1)
- 108.00±0.00(1)
- 124.10±0.00(2)
- 138.40±0.00(1)
- 149.30±0.00(1)
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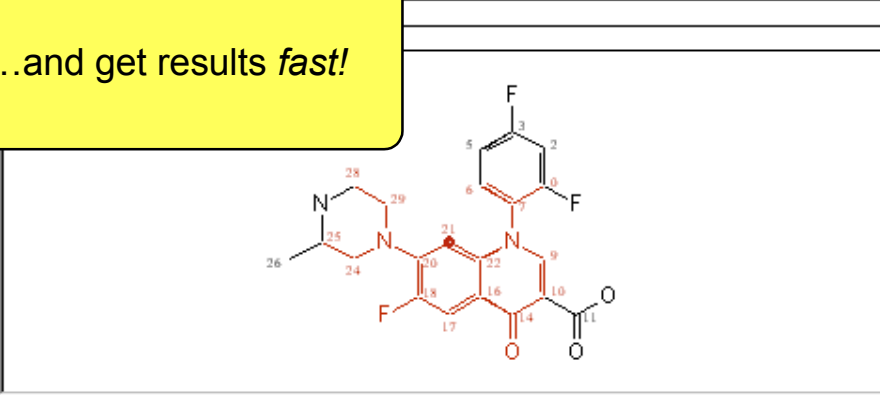
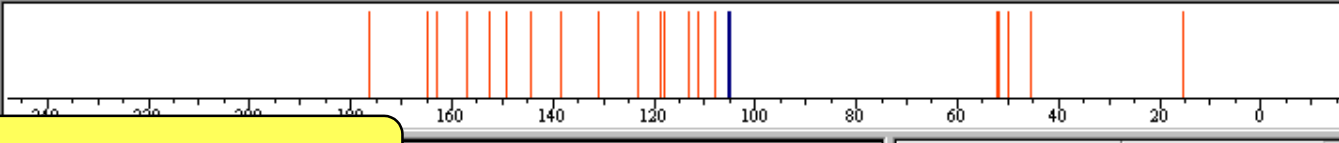
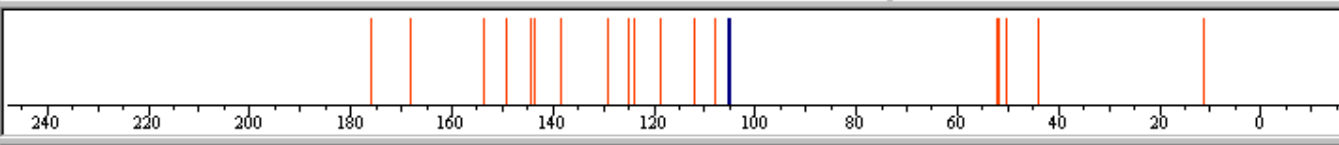
105.50

...and get results *fast!*

Predicted Shift Information



ID	Shift
7	11.35
8	105.50
9	138.40
10	52.00
11	168.10
12	153.50
13	175.80
14	124.10
15	143.70
16	149.30



ID	Shift
7	123.30
9	149.30
10	108.00
11	164.90
14	176.40
16	118.90
17	111.30
18	152.50
20	144.20
21	105.50
22	138.40

Selected Database Record

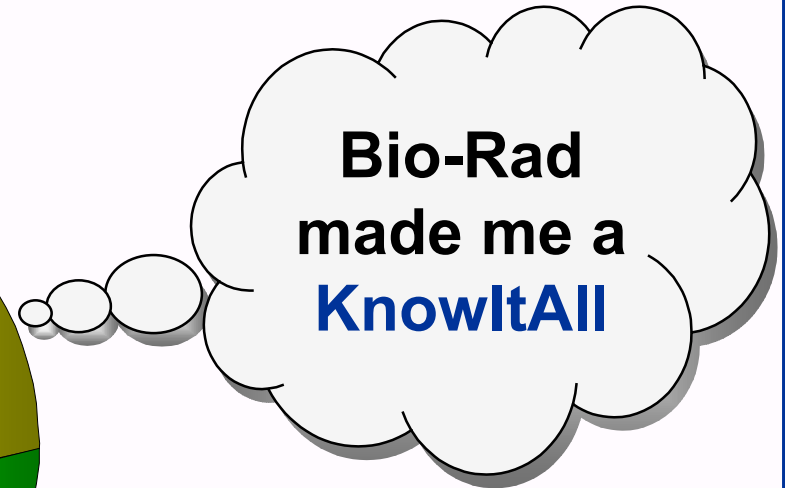
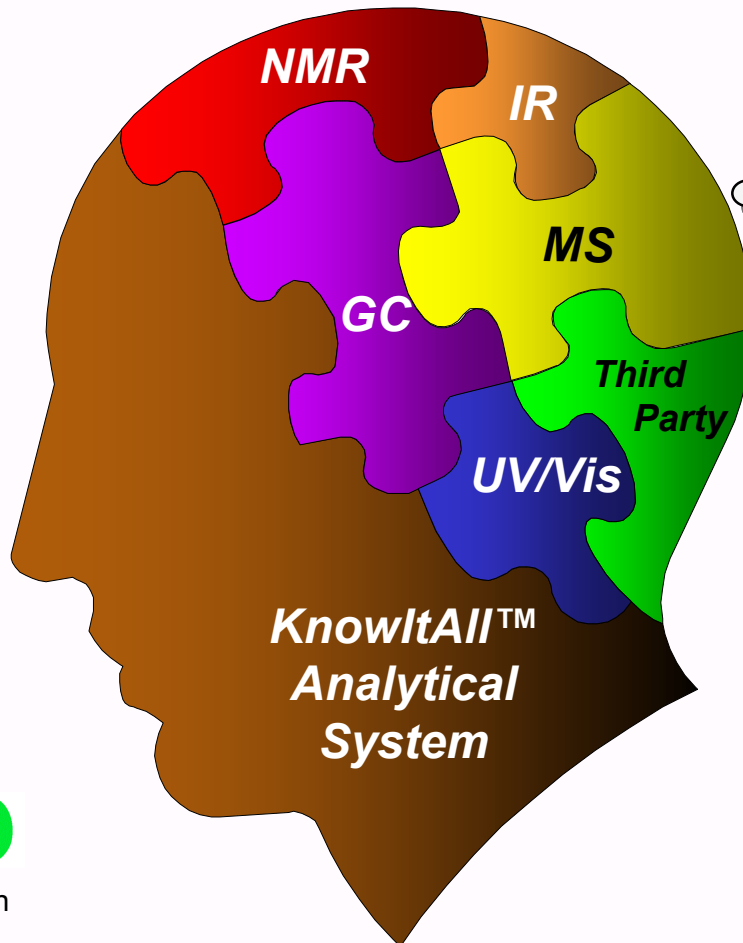
- Search Record 1
- Search Record 2

- IR
- UV
- MS
- GC

Multiple Analytical Techniques



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What I Learned



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- You can sneak a commercial for a product into a formal ACS presentation if you are subtle
- The head of the Bio-Rad Informatics Division's Software Development Team is a black belt juggler
- It is possible to link juggling and business:
“Bio-Rad helps you juggle analytical information”



What I Learned (Really)



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- Combining chemistry, informatics, and business experience leads to a very rewarding career
- Networking is critical
- Bridging from buyer to supplier helps you to be a better supplier
- The ACS CINF is a great place to network
- You all have been very patient

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Thank you

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