



Digital Vita: Research networking in the context of CV management

Titus Schleyer, DMD, PhD
Heiko Spallek, DMD, PhD
Brian Butler, MS, PhD
Linda Schmandt, MS

University of Pittsburgh

ctsi

CLINICAL +
TRANSLATIONAL
SCIENCE
INSTITUTE

Why don't scientists use expertise locating systems?

1. low awareness
2. incomplete domain coverage
3. outdated/sparse profiles
4. lack of critical mass
5. traditional approaches very ingrained

Scientists are not looking for a blind date.

Collaboration ...

- ... is often a long-term relationship.
- ... requires predicting future performance.
- ... benefits from deep knowledge about the collaborator.
- ... can have significant professional impact.
- ... is sometimes hard to end.

⇒ contrast to “expertise location” in traditional CSCW research

With regard to collaboration, scientists face “an embarrassment of riches.”

- science increasingly multi- and inter-disciplinary
- more collaborators through growing research enterprise
- collaborators easier to find through Google, MEDLINE, etc.
- remote collaborations increasingly practical

Braun T, Schubert A. A quantitative view on the coming of age of interdisciplinarity in the sciences 1980-1999. *Scientometrics* 2003 Sep;58(1):183-9.

Are current systems responsive to the requirements of scientists seeking collaborators?



Project goals

- develop preliminary requirements for researcher discovery system
- design a set of services and implement in a prototype system
- deploy system in practice
- evaluate

Methods

- literature review, affinity diagramming, contextual inquiries (10 researchers), semistructured interviews (30 researchers)
- ideation
- concept validation
- prototyping
- formative evaluation

Interdisciplinary project team (informatics, business, library and information science, human-computer interaction, IT)



Results

Requirements

- *effort balanced with perceived benefit*
- *profiles comprehensive and up-to-date*
- *exploit social network*
- *model proximity*
- *assessment of compatibility, work style and other "soft" traits*

Requirements (cont.)

- *social networks based solely on co-authorship incomplete*
- *accommodate preferences for privacy and public availability of information*
- *search effectively across disciplines*
- *facilitate non-intuitive connections*

Digital Vita live

Research Gateway **digital vita** welcome, Titus Schleyer [Sign Out](#) | [Help](#) | [My Settings](#)

Home My Information My Documents My Colleagues Search

[Generate a Document](#) Request or Send a Document

Use this page to make changes, updates and additions to your biographical information. Items you update here will also be updated in the documents you have already created on the [My Documents](#) page.

You have no additions.

Biographical

Personal Statements (2)

Research Interests (38)

Education & Training (4)

Academic Appointments (10)

Other Professional Positions (6)

Grants & Contracts (27)

Awards & Honors (5)

Publications (141)

Certifications & Licenses (4)

Professional Societies (9)

Presentations (79)

Service Activities (118)

Mentoring and Advising (29)

Publications Add Entry

Show Sort By Show per page prev 1 next

Viewing 74 Journal Articles of 141 total publications.

- 1 Song M, Spallek H, Polk DE, Schleyer TK, Wali T. How information systems should support the information needs of general dentists in clinical settings: suggestions from a qualitative study. BMC Medical Informatics and Decision Making. 2010; 10(7).
- 2 Irwin JY, Torres-Urquidy MH, Schleyer T, Monaco V. [A preliminary model of work during initial examination and treatment planning appointments](#). British Dental Journal. 2009 Jan 10; 206(1):E1; discussion 24-5.
- 3 Torres-Urquidy MH, Wallstrom G, Schleyer TK. [Detection of disease outbreaks by the use of oral manifestations](#). Journal of dental research. 2009 Jan; 88(1):89-94.
- 4 Torres-Urquidy MH, Acharya A, Hernandez-Cott P, Misner J, Schleyer T. [Evaluating the effectiveness of modeling principles for data models](#). Studies in health technology and informatics. 2009; 143:525-33.
- 5 Thyvalikakath TP, Monaco V, Thambuganipalle H, Schleyer T. [Comparative study of heuristic evaluation and usability testing methods](#). Studies in health technology and informatics. 2009; 143:322-7.
- 6 Christensen L, Harkema H, Irwin J, Schleyer TK, Haug P, Chapman WW. Medical Understanding and Semantic Analysis. 2009. (accepted)
- 7 Acharya A, Schleyer TK. Electronic dental record information model. Int J Medical Engineering and Informatics. 2009; 1(4):418-434.
- 8 Thyvalikakath TP, Monaco V, Thambuganipalle HB, Schleyer T. [A usability evaluation of four commercial dental computer-based patient record systems](#). Journal of the American Dental Association (1939). 2008 Dec; 139(12):1632-42.

My Information: Maintain, format and update biographical information

Research Gateway | digital vita | welcome, Titus Schleyer | [Sign Out](#) | [Help](#) | [My Settings](#)

Home | My Information | My Documents | My Colleagues | Search

[Generate a Document](#) | Request or Send a Document

Use this page to make changes, updates and additions to your biographical information. Items you update here will also be updated in the documents you have already created on the [My Documents](#) page.

You Have 76 Additions

- Biographical
- Research Interests (38)
- Education & Training (4)
- Academic Appointments (13)
- Other Professional Positions (2)
- Grants (3)
- Awards & Honors (12)
- Publications (20)
- Certifications & Licenses (4)
- Professional Societies (9)
- Presentations (4)
- Service Activities (6)
- Mentoring and Advising (2)
- Teaching Activity (5)
- Patents (0)

Additions/Updates

You have [71 New Publications](#), [3 New Grants](#), and [2 New Patents](#). You have no updates.

Accepted items are copied to/updated in your biographical information. Once you have rejected an item, you will not receive any further updates about it.

[Reject All](#) | [Accept All](#)

Show per page | prev 1 2 3 4 5 6 7 next

Viewing New Publications 1 to 10 of 71

Select All Messages on this page | [Reject Selected Messages](#) | [Accept Selected Messages](#)

- Torres-Urquidy MH, Wallstrom GL, Schleyer TK. *Detection of Disease Outbreaks using Oral Manifestations..*
- Thyvalikakath TP, Schleyer TK, monaco V. *Heuristic evaluation of clinical functions in four practicemanagement systems.* Heuristic evaluation of clinical functions in four practicemanagement systems.
- Thyvalikakath TP, thambuganipalle HB, Schleyer TK. *A usability evaluation of four commercial dental computer-based patient record systems.* A usability evaluation of four commercial dental computer-based patient record systems.
- Schleyer TK, Dziabiak M. *Remove primary test.* Test. 2009, May; 1(1)1-2.
- Schleyer TK. *Test.* J Am Med Assoc. 2009; 110(9999)1002-03.

Home
My Information
My Documents
My Colleagues
Search

[Generate a Document](#)
[Request or Send a Document](#)

Use this page to make changes, updates and additions to your biographical information. Items you update here will also be updated in the documents you have already created on the [My Documents](#) page.

You Have 76 Additions

- Biographical
- Research Interests (38)
- Education & Training (4)
- Academic Appointments (13)
- Other Professional Positions (2)
- Grants (3)
- Awards & Honors (12)
- Publications (20)
- Certifications & Licenses (4)
- Professional Societies (9)
- Presentations (4)
- Service Activities (6)
- Mentoring and Advising (2)
- Teaching Activity (5)
- Patents (0)

Additions/Updates

ⓘ You have [71 New Publications](#) , [3 New Grants](#) , and [2 New Patents](#)
ⓘ You have no updates

Accepted items are copied to/updated in your biographical information. Once you have rejected an item, you will not receive any further updates about it.

Reject All
Accept All

Show per page prev [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [next](#)

Viewing New Publications 1 to 10 of 71

Select All Messages on this page
 Reject Selected Messages
Accept Selected Messages

- Torres-Urquidy MH, Wallstrom GL, Schleyer TK. *Detection of Disease Outbreaks using Oral Manifestations..*
- Thyvalikakath TP, Schleyer TK, monaco V. *Heuristic evaluation of clinical functions in four practicemanagement systems.* Heuristic evaluation of clinical functions in four practicemanagement systems.
- Thyvalikakath TP, thambuganipalle HB, Schleyer TK. *A usability evaluation of four commercial dental computer-based patient record systems.* A usability evaluation of four commercial dental computer-based patient record systems.
- Schleyer TK, Dziabiak M. *Remove primary test.* Test. 2009, May; 1(1)1-2.
- Schleyer TK. *Test.* J Am Med Assoc. 2009; 110(9999)1002-03.



Home



My Information



My Documents



My Colleagues



Search

[Generate a Document](#)

[Manage Document Requests](#)

Use this page to make changes, updates and additions to your biographical information. Items you update here will also be updated in the documents you have already created on the [My Documents](#) page.

You have 3 additions.

Biographical (0)

Personal Statements (2)

Research Interests (38)

Education & Training (4)

Academic Appointments (12)

Other Professional Positions (6)

Grants & Contracts (27)

Awards & Honors (5)

Publications (141)

Certifications & Licenses (4)

Professional Societies (9)

Presentations (81)

Service Activities (118)

Mentoring and Advising (29)

Teaching Activity (28)

Patents (0)

Publications

Add Entry

Show All (141) Sort By Date Show All per page prev 1 next

Viewing entries 1 to 141 of 141.

1 Song M, Spallek H, Polk DE, Schleyer TK, Wali T. How information systems should support the information needs of general dentists in clinical settings: suggestions from a qualitative study. BMC Medical Informatics and Decision Making. 2010; 10(7).

2 Schleyer TK, Spallek H, Butler BS, Schmandt LM. Digital Vita: Facebook for Scientists. AMIA Summit on Clinical Research Informatics (CRI); San Francisco, CA. 2010. (in press)

3

Type of Publication: Journal Article

Authors: Irwin JY Torres-Urquidy MH Schleyer T [Add](#)

Title: A preliminary model of work during initial examination and treatment planning

Publication Date: 1/10/2009

Web Address:

Publication Status: submitted accepted in press published

Peer Reviewed Invited

Journal Title: British Dental Journal


Pages: E1; discussi

Volume: 206 Issue: 1

PubMed ID: 19119286 PubMed Central ID:

Cancel Save

My Documents: Output biographical information for CV, NIH and Web

Research Gateway | digital vita  welcome, Titus Schleyer [Sign Out](#) | [Help](#) | [My Settings](#)

Home My Information **My Documents** My Colleagues Search






[Generate a Document](#) Request or Send a Document


Use this page to create, edit and delete different types of biographical documents.
Once you have created a document, you will be able to select the information items to be included.
You cannot edit individual items. Please do that via the [My Information](#) page.

My Online Profile
[Edit my Online Profile](#)
[View my Online Profile](#)

Curriculum Vitae
[Edit Curriculum Vitae](#)

NIH Biosketch

- [test4](#) 
- [Test1](#) 
- [today](#) 
- [RFA 100=1](#) 
- [test3](#) 

 [Create new Biosketch](#)

Faculty Evaluation Form
[SODM Evaluation](#)

Home My Information **My Documents** My Colleagues Search

[Generate a Document](#) Request or Send a Document

Use this page to create, edit and delete different types of biographical documents.
Once you have created a document, you will be able to select the information items to be included.
You cannot edit individual items. Please do that via the [My Information](#) page.











My Online Profile


[Edit my Online Profile](#)
[View my Online Profile](#)

Curriculum Vitae

[Edit Curriculum Vitae](#)

NIH Biosketch

-  [test4](#) 
-  [Test1](#) 
-  [today](#) 
-  [RFA 100=1](#) 
-  [test3](#) 

 [Create new Biosketch](#)

Faculty Evaluation Form

[SODM Evaluation](#)



Home



My Information



My Documents



My Colleagues



Search

[Generate a Document](#)[Manage Document Requests](#)

R21 Recommender system

Citation Format:

Vancouver  [Export as PDF](#) [Export as RTF \(Word\)](#) [Save As...](#) [Save](#)

Use these pages to choose items to be included on your NIH biosketch named 'R21 Recommender system'.

By default, the NIH biosketch includes all of your academic and other positions, your honors, your peer-reviewed publications, and research grants that are current or that you completed within the last three years. You may, however, exclude individual items using the checkbox adjacent to the item.

Personal Statements (2)

[Academic Appointments \(12\)](#)[Other Professional Positions \(6\)](#)[Education & Training \(4\)](#)[Grants & Contracts \(27\)](#)[Awards & Honors \(5\)](#)[Publications \(141\)](#)[Professional Societies \(9\)](#)[Service Activities \(118\)](#)

Personal Statements

Viewing entries 1 to 2 of 2.

 1

General (*This statement will be displayed in your online profile*)

Titus Schleyer, DMD, PhD, is an internationally known researcher in the field of dental informatics. He is currently Associate Professor and Director of the Center for Dental Informatics at the University of Pittsburgh. Since 1997, Dr. Schleyer has been a recipient of a training grant for dental informatics from the National Institute of Dental and Craniofacial Research. Dr. Schleyer conducts research in dental computer applications funded by the National Institutes of Health and publishes regularly on dental informatics topics in major journals. In 2009, Dr. Schleyer was elected to the American College of Medical Informatics.

 2

R21 EBD (Heiko) 0210

In this proposal, I contribute important foundational work on the application, adoption and use of technology and informatics interventions in clinical dental care (2). Our research center has conducted foundational research on the adoption of clinical computing (2) and the Internet (1). I also have published a matrix of technologies and the clinical tasks they can support, as well as how dental informatics research can help improve the quality of care. Insights the information needs of practitioners (5), and various detailed technology assessments, for instance of the usability of dental practice management systems (4) and the content of electronic patient records (3), position me well to contribute to the development of novel informatics interventions for evidence-based dental care in this project.

My Colleagues: Maintain the social network and manage document flow

Colleague Requests (3)


All My Colleagues ([add](#))

Groups ([add](#))

- Photonic Protein Research
- Lab Group
- NIH Grant 14222334374
- ICMSB Conference
- Saliva Group


from others (3) | **from me (1)**

Listed below are researchers who would like to add you as their colleagues




[Robert William Campbell](#)
Structural Biology, University of Pittsburgh
Request sent: Jul 23, 2:12pm

Would you like to add Robert as a Colleague?



[Donald F. Waltermauer](#)
University of Iowa, Department of Biomedical Engineering
Request sent: Jul 21, 5:31pm

Would you like to add Donald as a Colleague?



[Luke Anderson](#)
Carnegie Mellon University, Department of Chemistry
Request sent: Jul 22, 3:21pm

Would you like to add Luke as a Colleague?

You can use this page to manage colleagues and groups of colleagues. You can view lists of all your colleagues or colleagues who are members of a group. You can add and manage groups from this page. You can view and remove requests for colleagues that you have made. You can respond to requests that you have received to become a colleague. To request new colleagues start on the [Search](#) page.

All Colleagues (10)

All Colleagues

Requests From Me (5)

Requests From Others (0)

Sort By Last Name

Groups [add](#)

My first group

Titus test group

UL1 group

Select all colleagues on this page. Request document from selected colleagues

Michael Becich
 Department of Biomedical Informatics, University of Pittsburgh
Research Interests: biological markers, bladder neoplasms, computational biology, computer communication networks, computer-assisted instruction, diagnostic imaging, gene expression regulation ... [more](#)
 Groups: [Titus test group](#)

Michelle Broido
 University of Pittsburgh
 Groups: [Titus test group](#)

Rebecca Crowley
 Department of Biomedical Informatics, University of Pittsburgh
Research Interests: intelligent tutoring systems, education, medical, information extraction, natural language processing, medical informatics, user-computer interface, attitude to computers, clinical ... [more](#)
 Rebecca is not a member of any groups.

Michael Dziabiak
 Test - Center for Dental Informatics, University of Pittsburgh, School of Dental Medicine
 Michael is not a member of any groups.

 Home
  My Information
  My Documents
  **My Colleagues**
  Search


[Generate a Document](#)
 [Manage Document Requests](#)


You can use this page to manage colleagues and groups of colleagues. You can view lists of all your colleagues or colleagues who are members of a group. You can add and manage groups from this page. You can view and remove requests for colleagues that you have made. You can respond to requests that you have received to become a colleague. To request new colleagues start on the [Search](#) page.


- All Colleagues (10)
- Requests From Me (5)**
- Requests From Others (0)


- Groups** + [add](#)
- My first group
 - Titus test group
 - UL1 group

Colleague Requests From Me

- 

Bill Shirey This request is pending.
- 

Ateev Mehrotra Your request has been rejected.
University of Pittsburgh
 sorry i already have a bff
- 

Petronila Vaux-Smith This request is pending. Sent: May 25, 2010 at 11:24am
 asdadsfafsd
- 

Heiko Spallek This request is pending. Sent: August 2, 2010 at 2:20pm
Center for Dental Informatics, University of Pittsburgh



Home



My Information



My Documents



My Colleagues



Search

[Generate a Document](#)[Manage Document Requests](#)

You can use this page to manage colleagues and groups of colleagues. You can view lists of all your colleagues or colleagues who are members of a group. You can add and manage groups from this page. You can view and remove requests for colleagues that you have made. You can respond to requests that you have received to become a colleague. To request new colleagues start on the [Search](#) page.

Rebecca Crowley, William Shirey and Mei Song have been added to this group.

All Colleagues (10)

Requests From Me (5)

Requests From Others (0)

Groups

[+ add](#)

My first group

Titus test group

UL1 group

GROUP: My first group[Add Member](#)[Remove Group](#)[add description](#) Select all colleagues in this group.[Request document from selected colleagues](#)

 **Rebecca Crowley**
 Department of Biomedical Informatics, University of Pittsburgh
Research Interests: intelligent tutoring systems, education, medical, information extraction, natural language processing, medical informatics, user-computer interface, attitude to computers, clinical competence, diagnostic errors, learning, medical records systems, computerized, models ... [more](#)

 **Steven Handler**
 Department of Biomedical Informatics, University of Pittsburgh
Research Interests: adverse drug events, adverse event reporting, computers, handheld, failure mode and effects analysis, geriatrics, long-term care, medication errors, nursing homes, patient safety, point-of-care systems, root cause analysis

 **William Shirey**

 **Mei Song**



Home



My Information

My

[Generate a Document](#)

[Manage Document](#)

You can use this page to manage colleagues and members of a group. You can add and manage. You can respond to requests that you have re

Rebecca

All Colleagues (10)

GROUP: My first

Requests From Me (5)

[add description](#)

Requests From Others (0)

Select all colle


Groups

[+ add](#)


My first group



Titus test group



UL1 group



[William Shirey](#)

Request a Document



Request:

Needed By: 

Message:

Please send me NIH biosketch for RFA LM-2010-189. Thx.

From:

-  Rebecca Crowley
Department of Biomedical Informatics, University of Pittsburgh
-  [Steven Handler](#)
Department of Biomedical Informatics, University of Pittsburgh

Cancel

Send

arch

a
ve made.

up.

ve Group

[more](#)

de and
-care

Search: Find collaborators efficiently and effectively


Research Gateway **experts** ⁺ welcome, Richard Tessella [Sign Out](#) | [Help](#) | [My Settings](#)

Home My Information My Documents My Colleagues Search

Generate a Document Request or Send a Document

Nancy L. Day (last updated 3/18/09) email: nday@pitt.edu

Summary Biographical Research Interests Publications Co-Authors Colleagues [View as PDF](#)



Professor of Psychiatry with tenure, Psychiatry, University of Pittsburgh

Publications 232
Cited 289

Research Interests [\(see all\)](#)
alcohol drinking, cannabis, cocaine, crack cocaine, ethanol, fetal alcohol syndrome, fetal development, marijuana smoking

Co-Author Distribution

within own department	37%
outside department/ within own university	44%
outside university	19%

Frequent Co-Authors [\(see all\)](#)

Chris Larkby, PhD co-authored
213 159

- Professor, Psychiatry, University of Pittsburgh
- Interests: child abuse, mental disorders, intergenerational effects stress, psychological stress disorders, post-traumatic violence
- Regularly publishes in: J Dev Behav Pediatr, Am J Med Genet B Neuropsychiatr Genet, & Am J Psychiat

Lindsey Goldschmidt, PhD co-authored
223 9 34

- Associate Professor, Health Information Management, University of Pittsburgh
- Interests: artificial intelligence, assistive technology, computer systems, data warehouse, decision support systems, clinical internet, machine learning
- Regularly publishes in: Trans R Soc Trop Med Hyg, Scand J Clin Lab Invest, & J Pharm Technology

Peter Russell, PhD 6 co-authored
226 284

- Professor, Psychiatry, Carnegie Mellon University
- Interests: alcohol drinking, cannabis, fetal alcohol syndrome, marijuana smoking, substance use
- Regularly publishes in: J Clin Endocrinol Metab, J Am Geriatr Soc, & J Am Acad Dermatol

Most Published In (total articles; most recent date)

- Neurotoxicol Teratol (21; Jan 2005)
- Alcohol Clin Exp Res (18; Mar 2006)
- J Am Acad Child Adolesc Psych (12; Oct 2006)
- J Dev Behav Pediatr (9; Jun 2007)
- Am J Psychiat (5; Apr 1997)


Recent Grants [\(see all\)](#)

- NIAAA - AA013566 (2006-2011)
- NIDA - FS009275 (2005-2010)
- NICHD - HD053470 (2007-2010)
- NIDA - DA019482 (2005-2010)
- NIDA - DA03874 - (2005-2010)

Organizations [\(see all\)](#)

- American College of Epidemiology
- American Psychopathological Association
- American Public Health Association
- Association for Clinical Psychosocial Research

Publications by Year Peer-Reviewed Only



[Home](#) [My Information](#) [My Documents](#) [My Colleagues](#) [Search](#)

[Generate a Document](#) [Request or Send a Document](#)

Nancy L. Day

(last updated 3/18/09)

email: nday@pitt.edu

- [Summary](#) [Biographical](#) [Research Interests](#) [Publications](#) [Co-Authors](#) [Colleagues](#)

[View as PDF](#)

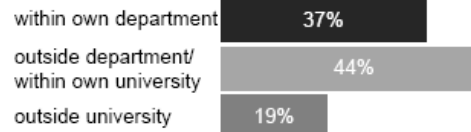


Professor of Psychiatry with tenure, Psychiatry, University of Pittsburgh

Publications 232
Cited 289

Research Interests ([see all](#))
alcohol drinking, cannabis, cocaine, crack cocaine, ethanol, fetal alcohol syndrome, fetal development, marijuana smoking

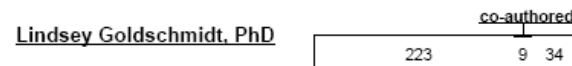
Co-Author Distribution



Frequent Co-Authors ([see all](#))



- Professor, Psychiatry, University of Pittsburgh
- Interests: child abuse, mental disorders, intergenerational effects stress, psychological stress disorders, post-traumatic violence
- Regularly publishes in: J Dev Behav Pediatr, Am J Med Genet B Neuropsychiatr Genet, & Am J Psychiat



- Associate Professor, Health Information Management, University of Pittsburgh
- Interests: artificial intelligence, assistive technology, computer systems, data warehouse, decision support systems, clinical internet, machine learning
- Regularly publishes in: Trans R Soc Trop Med Hyg, Scand J Clin Lab Invest, & J Pharm Technology



- Professor, Psychiatry, Carnegie Mellon University
- Interests: alcohol drinking, cannabis, fetal alcohol syndrome, marijuana smoking, substance use
- Regularly publishes in: J Clin Endocrinol Metab, J Am Geriatr Soc, & J Am Acad Dermatol

Most Published In (total articles; most recent date)

- Neurotoxicol Teratol (21; Jan 2005)
- Alcohol Clin Exp Res (18; Mar 2006)
- J Am Acad Child Adolesc Psych (12; Oct 2006)
- J Dev Behav Pediatr (9; Jun 2007)
- Am J Psychiat (5; Apr 1997)

Recent Grants ([see all](#))

- NIAAA - AA013566 (2006-2011)
- NIDA - FS009275 (2005-2010)
- NICHD - HD053470 (2007-2010)
- NIDA - DA019482 (2005-2010)
- NIDA - DA03874 - (2005-2010)

Organizations ([see all](#))

- American College of Epidemiology
- American Psychopathological Association
- American Public Health Association
- Association for Clinical Psychosocial Research

Publications by Year

Peer-Reviewed Only



Implementation

- “soft” rollout beginning 10/2009
- currently (7/31/10):
 - 417 users (20% of total population)
 - 359 logins, 77 active accounts
 - 10,726 publications
 - 1,636 grants
 - 3,655 presentations
 - 1,279 mentoring records
 - 924 social connections
 - 310 NIH biosketches

Discussion

- collaboration-seeking a complex activity
- does not depend on solely factual information about potential collaborators
- current approaches to finding collaborators time- and effort-intensive
- CV a good source of factual information

Project Website

<http://di.dental.pitt.edu/orc/>



Thank you for
your attention.
Questions?